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THE ORIGIN AND GROWTH OF THE MORAL INSTINCT

THE ORIGIN AND GROWTH OF THE MORAL INSTINCT

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BY

ALEXANDER SUTHERLAND, M.A.

IN TWO VOLUMES

VOL. I.

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THIS BOOK

I DEDICATE TO

MY MOTHER,

ITS FIRST READER, LONG ERE

IT WAS KNOWN TO

THE PRINTER.

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PREFACE.

If the name of Charles Darwin but rarely occurs in these pages, it is not that they owe little to his influence. On the contrary, full half of the book is a detailed expansion of the fourth and fifth chapters of his *Descent of Man*. But in that portion of his memorable work, the great naturalist has given us clearly to understand that he offers us only a brief sketch, not any full and completed demonstration. His progress in these chapters reminds us of the march of some active and brilliant general who outlines a great conquest, but leaves behind him many a fort, and city, and strong place, to be subsequently beleaguered by plodding officers, each concluding in his own province, by time and labour, what his commander had effectively done in design. Darwin showed in these chapters a noble gift of insight, but to have made good his position from point to point, to have left nothing behind him unreduced, would have demanded a labour which neither his own health nor the length of an ordinary life would have permitted. He left many a department in which a book such as the following might make itself useful, by laboriously filling in the master's scheme.

Yet there has been occasion only rarely to make specific acknowledgment of services derived; for the materials on which he based his sketch, amplified by the intervening time, have been open for further research, and as these have here been quoted always at

first hand, Darwin's influence has grown too general to be mentioned from page to page.

And there is another, amid the mass of writers herein cited, to whom in less degree the same acknowledgment is due. Adam Smith would in all likelihood have revealed the origin of our moral instincts, had he only possessed a mere suspicion of that greatest of biologic truths which Darwin was subsequently to establish. He saw that morality was founded on sympathy, but nowise perceiving whence that sympathy could possibly be derived, the whole remained involved as much in mystery as ever. Though sometimes quoted in these pages, Smith's *Theory of Moral Sentiments* has had more influence on them than I have specifically acknowledged.

During eleven years I have worked at this book, collecting its materials in more or less desultory fashion in leisure of other work, but of late I have been able to devote myself almost exclusively to it. Nevertheless, a sense of depression attends the contrast between the dreams of fifteen years ago and the tame reality which is all that these years have been able to produce. Cheerfully enough would I spend another four years, if I saw, in any reasonable faith, a hope of thereby making it appreciably approach that early ideal. Yet it is not mine to judge it, and I leave it to find its own degree of usefulness. Sincerity of effort may have power to atone for much of inherent feebleness.

The very nature of my book involves the traversing of many diverse sciences, each of them the province of accomplished specialists, and I must ask of such of these as may read it to remember that the historian of the growth of our moral instinct must deal to the

best of his ability with so many distinct departments of our knowledge, with zoology, with physiology, with anthropology, with history, and law, and philosophy, that he must be content with a very moderate depth in each. In every science, and every department of a science, I have gone, as I think, to recognised authorities. I have given, as a rule, only the matured conclusions of standard writers. Nevertheless, a want of technical knowledge will infallibly betray itself even in compilation. Even when all that is urged is strictly true, there will often be some scarcely definable ring of the amateur which will catch the ear of the expert. Yet shall I not be much concerned, unless the want of confidence thus engendered shall weaken in the minds of some the cogency of proofs which in the hands of an expert ought to have been convincing.

All my previous literary work has been so exclusively Australian that I feel in this book as though only for the first time coming in front of the public; but as no previous effort has cost me anything like the same amount of labour, I feel that not lightly have I made the more extended venture. And I hear it often asserted that he who has something to say, and who takes the pains to say it intelligibly, is always sure of a hearing in England.

ALEXANDER SUTHERLAND.

CONTENTS OF VOL. I.

CHAPTER I.

PAGE

A Preliminary Outline 1

CHAPTER II.

The Origin of the Parental Instinct 20

The Destruction of Life, p. 20—Two Paths of Species Preservation, p. 24—Value of Parental Care, p. 30—The Viviparous Habit, p. 36.

CHAPTER III.

Parental Care in Amphibians and Reptiles 41

Among Amphibians, p. 41—Among Reptiles, p. 46.

CHAPTER IV.

Parental Care of Birds 54

The Incubating Instinct, p. 54—Birds of the Lower Grade, p. 59—Birds of the Medium Grade, p. 61—Birds of the Higher Grade, p. 64.

Appendix—Law of the Period of Incubation, p. 69.

CHAPTER V.

Parental Instinct in Mammals 72

The Viviparous Habit, p. 72—The Marsupials, p. 74—The Placentalia, p. 80—Non-deciduate Placentalia, p. 82—Deciduate Placentalia, p. 86—The Monkeys, p. 90—Mankind, p. 95.

Appendix A—Rate of Propagation, p. 100.

Appendix B—Period of Gestation, p. 101.

PRELIMINARY TO CHAPTER VI.

The Classification of Mankind 103

Savages, p. 103—Barbarians, p. 105—Civilised, p. 106—Cultured, p. 107.

CHAPTER VI.

PAGE

PARENTAL CARE IN MANKIND 109

Diminishing Numbers of Offspring, p. 109—Rise of Infanticide, p. 113—The Disappearance of the Lower Races, p. 120—Lower Barbarian Parents, p. 125—Middle Barbarian Parents, p. 129—Decline of Infanticide, p. 131—Infanticide in Rome, p. 135—Teutonic Infanticide, p. 138—Infanticide in Modern Civilised Races, p. 141—Self-restraint the Nobler Substitute, p. 146—Lengthened Period of Parental Care, p. 150—Elimination of the Less-parental Types, p. 153.

CHAPTER VII.

THE GROWTH OF CONJUGAL SYMPATHY 158

The Sympathetic Type leaves the Greater Progeny, p. 158—Conjugal Feeling in the Lower Mammals, p. 161—Conjugal Feeling in Birds, p. 166—Conjugal Feeling among the Higher Mammals, p. 171—Conjugal Feeling among Savages, p. 174—Monogamy prevails in Savage Life, p. 180—Promiscuity, succeeded by Monogamous Union, the Early Bent of Mankind, p. 186.

CHAPTER VIII.

THE IDEAL OF CHASTITY... 190

The Purchase of Wives, p. 190—The Capture of Wives, p. 195—Obligation to Chastity at first Confined to Women, p. 201—Wife Purchase among Barbarians, p. 203—Wife Purchase renders Marriage more Stable, p. 209—Female Chastity among the Higher Barbarians, p. 213—Polyandry, p. 216—Female Chastity in Greece, p. 218—Chastity among Semitic Races, p. 223—Chastity in Rome, p. 225—Teutonic Chastity, p. 228.

CHAPTER IX.

THE STATUS OF WOMAN AND THE CHASTITY OF MEN 233

Sympathy the First Origin of Male Chastity, p. 233—The Status of Woman not the Same as the Treatment she receives, p. 236—The Decline of Wife Purchase, p. 240—Rise of the Dowry System in Europe, p. 249—Woman Acquires a Status, p. 256—Effects of Various Religions, p. 265—The Tutelage of Women, p. 270—Effects of Christianity, p. 273—Effects of Chivalry, p. 280—Effects of Disease, p. 282—Status of Woman in England, p. 285—The Dawn of Nobler Conjugal Sympathies, p. 287.

CHAPTER X.

THE GROWTH OF SOCIAL SYMPATHY IN ANIMALS 291

Parental Sympathy spreads out into Social Sympathy, p. 291—Alleged Sympathy in Insects, p. 294—True Sympathy first appears with the Warm-blooded Types, p. 300—Social Sympathy in the Lower Birds, p. 304—Social Sympathy in the Higher Birds, p. 310—Social Sympathy in the Lower Mammals, p. 317—Social Sympathy in the Higher Mammals, p. 323—Social Sympathy in the Quadrumana, p. 332—Social Sympathy in the Apes, p. 343—Social Sympathies in Man, p. 349.

CHAPTER XI.

PAGE

SOCIAL SYMPATHY IN MANKIND 353

The Widening of Sympathy, p. 353—Preservative Value of Social Sympathy, p. 354—Increasing Size of Social Unions, p. 359—Social Sympathy begins by being Deep but Narrow, p. 366—Social Sympathy in Savages, p. 370—Social Sympathy among Barbarians, p. 379—Cannibalism, p. 387—Cannibals may be Affectionate, Good-tempered People, p. 391—Care of the Sick and Aged, p. 394.

CHAPTER XII.

THE GROWTH OF SYMPATHY AS SHOWN IN BENEVOLENCE 400

Civilisation apparently Breeds an Element of Misery, p. 400—Hospitals and Asylums, p. 403—Rise of Hospitals in Europe, p. 406—The Era of True Beneficence, p. 414—Nineteenth Century Beneficence, p. 420.

CHAPTER XIII.

THE GROWTH OF SYMPATHY AS SHOWN IN WARFARE 425

The Warlike Elements of Society destroy Each Other, p. 425—War among Savage Races, p. 428—Warfare among Barbarians, p. 431—Warfare among Civilised Races, p. 439—Warfare in Early Mediæval Europe, p. 447—Decline of the Spirit of Ferocity, p. 454.

THE ORIGIN AND GROWTH OF THE MORAL INSTINCT.

CHAPTER I.

A PRELIMINARY OUTLINE.

I ascribe to Nature neither order nor disorder; neither beauty nor deformity; for things, I hold, are orderly or disorderly, beautiful or ugly, in relation to our conceptions only, and not in themselves.—*Spinoza, Letter to Oldenburg.*

It is the purpose of this book to show, how from the needs of animal life as they rose and developed, there sprang, at first with inexpressible slowness, but imperceptibly quickening as it advanced, that moral instinct which, with its concomitant intelligence, forms the noblest feature as yet visible on this ancient earth of ours. The inquiry thus to be undertaken will, as I hope, be wholly without prejudice to those grander and deeper questions of philosophy that lie beneath it and beyond it—questions which, though ever near at hand, pressing on the heart even of the child if he be of thoughtful mood, yet preserving to the ripest years a sense of wistful fascination, must none the less be answered always in a manner more or less uncertain and speculative. For to finite sense the infinite must stand apart, and these wider speculations therefore lie outside the purposed scope of my investigations, wherein appears alone the growth of our moral instincts from their humble source among the lower animals. With absolutely unbroken continuity that development will be traced through lowliest savage to the noblest of men, always as a biologic process; nor shall I make the least attempt to

correlate it with any possible scheme of the universe. How these ethical conceptions may shape as fragments of an all-embracing thought may offer a field for discussion vaster and more sublime, but one that is absolutely and necessarily remote from the range of this inquiry.

Throughout its earlier chapters, my book will follow the growth of sympathy; it will show how, in due course, parental care must have made its beneficent appearance as an agency essential to the emergence, the survival and subsequent ascendency of the more intelligent types, amid a world of ceaseless competition. Having shown how sympathy thus entered on its first humblest existence, I hope in succeeding chapters to indicate how it has deepened and expanded, and how there has arisen from it the moral instinct with all its accompanying accessories, the sense of duty, the feeling of self-respect, the enthusiasm of both the tender and the manly ideal of ethic beauty. Lastly, a few final chapters will enter on an inquiry as to the physiological basis of those emotional susceptibilities which we collectively call by the name of sympathy.

(Chapter II.) A few preliminary pages will depict the huge destruction of life that marks the daily routine of our earth. Often enough has this been done before, but as it is essential to the whole validity of the demonstration which follows that the reader should once for all have realised in some slight measure the stress and struggle of the competition, should have felt within his mind how faint, how inexpressibly faint, is the chance of survival for the individual in the lower forms of life, I have deemed myself free to draw the picture yet once more after my own fashion.

That immeasurable waste of life which destroys a million creatures for every one that is destined to survive, can be met and resisted only by an extravagant fertility. Among fish, as we shall see, the average mother deposits more than 600,000 spawn, whereof but one or two surviving will serve to keep the species replenished. It is plain, therefore, that a very little thing, the most trifling advantage, may serve to pick that one out of half a million which is to be the successful competitor. Under ordinary

circumstances the preservative feature will not be an advance in intelligence; for such an advance implies a greater intricacy of nerve organisation, which cannot occur without an increasing period of immaturity. But it is precisely in this time of growth to adolescence that the individual is most perilously encompassed. No doubt the creature of highest nervous type would, if once it reached maturity, be dominant; but its lengthened period of helplessness is fateful to it in a world that swarms with dangers. If the eggs of a fish take in general thirty days to hatch, but a few of better brain and higher nervous type take thirty-one, none of these will eventually prevail. For if only one out of half a million is to survive, an individual that runs these formidable risks a day longer than the rest will assuredly not be that one. All the powers that might have become visible when maturity should have been attained would therefore never be known, for the time of immaturity would too rarely be passed by the more highly-organised individual, and where one did chance to escape, its progeny, if inheriting the same higher development, would in general be less lucky.

It is this which makes the lower species breed so true to their own humble nerve development; it is this which keeps abundance of the lowlier tribes in existence side by side with others that have advanced. A huge fertility, a rapid hatching, an early maturity, therein lies the safety of the unintelligent types. But suppose that in the slow succession of monotonous ages a slight advance in nerve organisation should happen to synchronise with a small tendency on the part of parents to guard their eggs or their offspring, the higher type might, and probably would, thereby escape the danger of its prolonged immaturity. And if so, it is very plain that when, under this sheltering condition, it did in fact attain its adult state, then would its quicker sense, its subtler brain, its more deftly co-ordinated powers give it ascendency over all its fellows.

Whenever a species has ceased to compete by means of an overwhelming fertility, and has begun to adopt instead the policy of fewer offspring, better equipped and longer guarded, then the prevailing influence of parental care begins

to be most manifest. No longer does the mother waste her body substance in providing yolks for a million germs, each of them after all but poorly supplied. She produces but a few eggs, provides them handsomely with nutriment, and possibly brings them into the world all duly hatched. In the thousands of species of fish that merely void their eggs and depart, the yearly average is over a million to each female, whereas in the 200 species that exhibit, consciously or unconsciously, some parental care the average is no more than fifty-six as the yearly spawn of each female.

(Chapter III.) In no cold-blooded animal does parental care assume to any very perceptible extent the form of a conscious solicitude. It is merely some mechanical contrivance whereby the eggs, instead of being extruded to meet the dangers that everywhere surround them, are kept within a bag, or squeezed to the sides of the mother, or secured within a nest, or, best of all, retained in the maternal oviduct till fully hatched. Amphibians and reptiles exhibit all these tricks and dodges whereby to secure their eggs from danger, and here, as among fish, the best of all is the hatching of her eggs within the oviduct of the mother. It will be shown that among fish and reptiles which have adopted that method of safety, an average of twenty young per annum is as good as 5,000,000 in the codfish or other species that have no parental care of any sort.

(Chapter IV.) Rising into the warm-blooded types, we see how this quality displays a steadily ascending influence. Only by means of parental solicitude can the young of bird or mammal be developed or secured, while, through its early days, it slowly grows to that high standard of nervous delicacy which is to make it eventually dominant. But in the manifestation of that solicitude the bird and the mammal choose each its own out of two divergent paths, already fitfully selected—now by one, now by another—of the species of reptiles. The bird adopts the path of incubation; the mammal of gestation; each showing in its own track an ever-upward tendency to efficiency. Birds, as we rise in the scale, grow more accomplished in the weaving of their nests, more methodic in their habits of brooding, more devoted in the

care that follows upon hatching. Each advance in parental care lessens the number of offspring that are needed. Thus, as I hope to show, species of the less intelligent grades of birds such as make no nest and display least care have an average of 12·5 eggs per annum to each female; those of greater intelligence which make rude nests and display a moderate devotion to their young lay on the average only 7·6 eggs each year; while those of the highest intelligence, whose nests are finished productions and whose devotion to their young is strong, are able to keep their species replenished with only 4·5 eggs each year to every female.

(Chapter V.) The mammals, taking the other of the two diverging tracks, display an equal tendency to progress. The female keeps her eggs within her till they are hatched. The increasing warmth of her body, the more and more intimate connection of the egg with her uterine tissues, the consequent fulness of the provision for its nutrition, and the supply of milk for its nurture after birth all indicate the development of unconscious or mechanical modes of parental care. But along with these there is seen a steady growth of that conscious care which bids the mother sacrifice her comfort or life itself on behalf of her young one. At first in the monotremes all this is very rudimentary. The egg lies loosely in the oviduct as it would in a shark's. The animal's body-warmth is low; its supply of milk is far less nutritious than that of other mammals; the maternal care is short and not emotional. Marsupials show an advancement, and so the progress goes on till, in the monkey order, the provision made by placenta, lactation, and maternal devotion during infancy reaches a notable standard of efficiency. That the parental care of the mammal is more effective than that of any other class is shown by the fact that on the average of all species the number of offspring is only 3·2 per annum to each female. Moreover, though discrepancies occur, there is from order to order through all the class a general diminution in the number of the offspring as we rise in the scale, so that the monkeys with one young one a year can hold their own quite as well as fish with a million. I hope to show that when proper adjustments are made for the widely vary-

ing sizes of different species, the period of gestation is proportional to the general degree of advancement of the nervous type.

(Chapter VI.) An investigation will then be made of the development shown in parental care among mankind; the number of offspring is steadily diminished, that diminution being rendered possible by a great increase in the length and quality of the parental devotion. In this and subsequent chapters, there will be needed a classification of mankind, independent of race affinities and founded only on the position of each people in regard to intellectual advancement. Under the names of the *Lower*, *Middle*, and *Upper Savages*, I shall arrange all races of generally unsettled habitation; under those of *Lower*, *Middle*, and *Upper Barbarian*, I shall classify those who have learnt to build permanent dwellings and to cultivate the soil. The *Lower*, *Middle*, and *Upper Civilised* peoples will consist of those among whom commerce and manufactures are well developed, and who by systems of laws and their effective administration are able to preserve order in large communities. Lastly, a group will be made under the names of *Lower*, *Middle*, and *Upper Cultured*, of which only the first is yet existent, consisting of the leading nations of the world in our own times, the other two being developments to be expected of a future remote, and yet remoter.

In the lower savages, parental care appears only as the continuation and improvement of the same quality which is seen among the monkeys, a slightly better placental provision, a longer lactation, and a greater subsequent period of devotion. It increases in efficiency through barbarian race and civilised, and at each stage in its progress, the number of offspring brought into the world declines. At the level of the middle savage, men perceive that fewer children better cared for lead to happier results; yet they are not content, as indeed they cannot be, to wait until nature shall produce the less prolific strain of correspondingly more intelligent type. They are incapable on the other hand of self-restraint, and thus the diminution of offspring which all along until then has taken place by a certain emergence of less prolific types, is provided for among middle and upper savages by means of abortion and

infanticide. But these must grow abhorrent with increase of general sympathy, and at the level of the middle barbarian they begin to decline, men providing for the desirable diminution of offspring by acquiring the power of self-restraint, this chiefly by way of deferred marriages, which, it is easy to see, will be operative mainly by the prolongation of the period of maidenhood among girls. Thus the average age at which the girls of savage races are married is little over eleven years, while in the cultured races of Europe in the present time, the age at which spinsters are married exceeds an average of twenty-five years; whereby comes this most useful result, that the offspring are fewer, but the parental care more competent. The process still goes on. The daughters of the most cultured classes are now the latest to be married, and those of all classes are following the same tendency. Indeed for a long time past in Europe the average age at which girls are married has been increasing at a very perceptible and steady rate. At the same time parental care progresses. The cultured classes keep their children busy with a long education till near the age of twenty, and all the great national systems, with the lengthening curriculum of each, show how we still proceed in the uniform progress of having fewer offspring but giving them a better equipment for their share in the competition which life inevitably implies.

(Chapter VII.) The growth of parental sympathy has thus been no mere accessory. It was an absolutely essential condition before types of high intelligence could appear. But the organism that had become so delicately equipped as to be susceptible to the emotions of parental sympathy was thereby made more ready for other analogous stimuli. Thus conjugal sympathy, the sympathy that changes a mere periodic outburst of gratification into life-long tenderness and companionship, became antecedently probable, and being of preservative value, it was steadily developed. For it gave to the offspring the great advantage of united care on the part of both its parents.

Conjugal tenderness and fidelity begin only on the level of the warm-blooded animals. They reach a great development in the highest birds, and in mammals, though more gradual in growth, they become in the carnivora and quadrumana some-

what notable. They are, however, not of any really great development among mammals till we attain the level of mankind. Conjugal sympathy of a rude but unmistakable sort appears in the lowest savages, among whom, though youths and girls indulge their early passions in promiscuous fashion, there is always a strong tendency sooner or later for the sexes to mate, so that as parents they may indulge the natural instinct of love and care for their children, and also provide each for the other the satisfaction of home-life and familiar comradeship. Out of these relations there arises a very rude and only dawning conception of chastity.

(Chapter VIII.) But this conception is among savages never more than a mere matter of domestic comfort, a source of peace, a haven of conjugal rest after an early period of sexual excess. There is no ideal which makes chastity a thing beautiful in itself. But when men begin to gather exchangeable wealth, women as the means of gratification, both sexual, parental, and industrial, acquire a definite value. The suitor then has to purchase his bride from her relatives. This tends to enforce the growing notion of chastity, for whatever licence the husband may take, he demands, and has the strength to compel, that his wife should regard herself as exclusively his. No ideal of personal purity is much understood, for the husband very freely lends his wife, exchanges her for another man's, or barters her temporary company. But the system of purchase does much to develop the notion that constancy is the duty of the married woman, and when that feeling has taken a strong root, it is natural that the value of the bride should be increased if she is known to be uncontaminated at her marriage. But the ideal of virgin purity thus originated is very slow in growing. It is fairly well developed at the level of the higher barbarians, and is of preservative value, preventing the birth of children till the fathers are prepared to undertake the responsibilities of home, and the nurture of a family.

(Chapter IX.) When we reach the stage of the lower civilisation, the obligation of women to chastity is well established. Men acknowledge no such obligation. In polygamy and concubinage they assert their freedom from any

limitation except that of not interfering with the purchased property of their neighbours. But in the higher grades of civilisation, men realise the superior comfort of a peaceful home, and a truly sympathetic union. Each man then admits the claims of male chastity, not perhaps as a personal duty, but as a matter of kindness and good-feeling towards the wife who loves him, and for whom he has formed an attachment. The idea of male chastity therefore springs from the growing sympathy felt for the feebler woman, and it keeps pace with an improving status of women, a progress which is seen in the gradual decline of the system of marriage by purchase. The customary payment begins to be refused by the bride's parents, who grow ashamed of selling their daughter. They hand it over to the bride herself, and so arises the system of dower. As parental sympathy improves, the parents from their own property add to this more and more liberally, partly in order to start the young couple in comfort, partly in order to secure for their daughter the most desirable of suitors. Hence arises the system of dowry. I shall follow in detail from that point, the story of the steady rise in the status of women, and hope to show that, as a necessary accompaniment, there must occur a steadily augmenting deference to women, founded in part on an increasing susceptibility to the charms of beauty, but in still larger part on a sympathetic regard for woman's weakness. The development of this lofty feeling has a powerful, though somewhat hidden influence in securing the pre-eminence of a race. The sons and daughters who come from pure homes wherein they have never witnessed anything but the tenderest affection between their parents, are far more likely to succeed in life than those brought up in families subject to the disruptive influences of jealousy and strife.

(Chapter X.) Thus sympathy, whose earliest function it was to turn the mother into a careful guardian of helpless infancy, likewise comes to convert the merely lustful male into the tender lover and careful father. The same susceptibility to sympathetic stimulus begins to form a bond between brethren, between kinsmen, between neighbours. Mere gregariousness is of small value, but social sympathy, which is of an utterly different character, is of the utmost importance in

preserving a species. I shall trace its growth and increasing influence in birds and in mammals. It continues to develop in man, for the degree of intelligent co-operation and sympathetic union which exists in the lowest savages gives to the tribe of thirty individuals a distinct ascendency over all other creatures of forest and field. But among the higher grades of mankind the increasing faculty of uniting solidly, of forming large well-disciplined armies, of constituting great industrial organisations, is fatal to the savage, who disappears as being the less social race.

(Chapter XI.) A very sketchy retrospect of human history will serve to show that in the main it has been the story of the subservience of races too little sympathetic to form powerful unions, and the emergence to power and dominance of peoples more capable of hearty consolidation. The law of sympathy has therefore been the law of progress. The more man has developed, the greater the need and inclination he has felt for life in ever-increasing association. The tribe in the lower savages numbers forty persons to each on an average; among the middle savages the average is 150; among the higher savages 360. Barbarians of the lower grade number 6500 to the average community, while among the middle barbarians 228,000 appears as the mean size. In the higher barbarians it is increased to 442,000. But the lower civilised races, on the average of all peoples, number 4,200,000 to a community. The middle civilised show only a slight rise to 5,500,000, but the higher civilised increase to 24,000,000. The process still goes forward; the average of the most cultured nations of to-day is about 30,000,000, but the five most advanced of them have nearly 80,000,000 people each.

It is a wonderful thing, incomprehensible to a savage, how millions of people can dwell together without fighting, knit in hundreds of useful co-operations and forming cities of myriad dwellings with never a weapon seen or a midnight summons heard calling to arms. The features are indeed so multitudinous, which testify to the growth of the social sympathy of mankind, that I have felt it necessary to confine myself to two out of the five most characteristic, leaving to mere allusions the other three, which are the rise and decline of

slavery, the story of the treatment of criminals, and the story of religious animosities.

(Chapter XII.) But I shall fully describe the growth of kindness to the sick and destitute, a progress of extreme slowness in primitive races, but quickening greatly in the last two or three centuries; as yet far from having culminated, but with striking evidence in the hospitals, asylums, and similar insitutions to which in the last century it has given rise.

(Chapter XIII.) Then I shall relate the story of declining ferocity in warfare, from the cannibal, head-hunting, scalping vindictiveness of the savage to the comparatively honourable and merciful warfare of our own times.

(Chapter XIV.) When we have traced the capacity of sympathy to a reasonable degree of cogency, we have in fact witnessed the growth of a natural form of morality; not a complete morality, but a very serviceable, homespun article, extremely good of its kind. The man who never fails of kindliness in his relations as father, husband, brother, friend, or citizen is a good man. There are three higher stages he may yet attain. There is the morality of duty, the morality of self-respect, and there is the morality which springs from an ideal of the beauty of goodness. But these by themselves are weak and pretentious things when they want their natural basis, a true and warm-hearted sympathy. Sympathy, or, as it is there called, love, is the basis of morality, indeed *is* morality in the religions of Jesus and of Buddha. I hope to show that each of the virtues which we include as necessary to the right conduct of a human being is directly or indirectly founded on sympathy.

(Chapter XV.) But the morality of sympathy alone is a somewhat inconstant regulator, changing much with varying emotions; it lacks the fixity, the capacity of being predicted that marks the more developed moral feeling of a later stage. But when the sympathy of a race has found expression in maxims or in laws, when all the weight of public opinion, with its punishment of reprobation, its reward of applause, has been invoked to enforce that conduct which is accordant with the average sympathy, there springs up a

sense of duty, a feeling that the individual is to look not only inwardly for what his own sympathy dictates, but outwardly also to what the average sympathy of his race would demand. And this feeling, intensified by the sanction of ordinances expressive of the sympathetic ideas of the times, grows up within the individual from an unremembered period of infancy, and so assumes that absolute and unconditional aspect, which is so characteristic of the sense of duty; though, as a matter of fact, it is purely relative to the character of the people and of the period amid which the life of the individual is cast.

The content of every idea of duty is determined by the average sympathy of the race at any particular time; but the sanctions which give to any duty its impressiveness arise from: (1) public opinion; (2) imitation; (3) authority; (4) habit. Of these the first two are purely matters of sympathy. As for the third, if deference to authority be not sympathetic, it gives rise only to a prudent self-concern, and results merely in a quasi-morality, a something extremely useful to human societies, but not in any way akin to the moral ideal. Only when sympathetic, does a feeling of reverence for authority produce a true morality. Habit is not able to originate morality, but only to render automatic that which has been already originated. Public opinion, operating from a period of infancy utterly unremembered by us, is the real basis of duty; but it is capable of enforcing duties upon us which are mere fashions of time and place. These I shall call pseudo-moral. They indicate the immense strength of the sanctions that enforce morality, but they are more or less capable of rapid or slow evanescence, while the true moral duty, based on permanent sympathies, gathers force as the generations pass; new strength of public opinion is added as each new century records its assent to the traditions handed down from the old.

(Chapter XVI.) But morality is not yet complete though a man's inner sympathies are warm, and his nature schooled to defer to that opinion which expresses the average sympathies of the public amid which he lives. When a man has grown accustomed to judge others by the standard of his

sympathies, when he has acquired the habit of disapproving or applauding the action of others, he naturally turns inwardly the same critical faculty on his own actions. If his nature is logical and sympathetic he condemns in himself what he would condemn in others, and so he learns to act always as before the sight of his own critical self. Morality assumes a very noble aspect when, to sympathy and a cheerful compliance with duty whose sanction is external, there is added a complete surrender to that sense of self-respect which is only duty with an internal sanction. A man accustomed to scorn all baseness in others is freed from the temptation of baseness in his own conduct, by the knowledge that evil, if yielded to, will sting him with the scorn of his own subsequent self.

(Chapter XVII.) But morality appears in all its noblest guise, when upon these three there is superimposed an æsthetic glow; when the sight of right conduct awakens all the enthusiasm that kindles within us at the aspect of aught that is beautiful. Here will arise a need of a very brief digression to show the origin of our notions of beauty of sight or sound. For to the same general class of influence must be ascribed the development of an idea of beauty in character. When the stage is reached wherein an idea of loveliness has gathered round the appearance of kindness, purity and truth, morality has assumed the highest aspect as yet known to us. The origin of this enthusiasm I propose to examine in some little detail, and thence to show the development of two ideals of virtue—the manly, courageous one, and the soft, tender, womanly one.

(Chapter XVIII.) Having thus traced the growth of a true morality to its loftiest manifestation, it becomes necessary to descend to that practical morality which rules the everyday affairs of life. Therein the quasi-moral is of equal utility with the true, though far less worthy of admiration. This quasi-morality finds its basis in responsibility which ripens into law.

The subject of responsibility is one of intricacy to those who perceive that necessitarianism is the outcome of scientific research. If the individual inherits his character as much as his bodily structure, and if that character is modified only by

surrounding circumstances which he did not choose for himself; or if, in the case wherein he did so choose them, his capacity of choice was entirely due to inherited will-power, and if the nature of the choice he has made must have depended on his character as inherited and acquired from early environment, then how is he to be held responsible? I trust to show that the question of responsibility is not in the least concerned with any such problems. It is concerned only with the due constitution of motive. When I hold a child responsible for telling a lie, I do not in any way deny that it owes its weaknesses of character to circumstances wholly outside of its power. But while it has strong motives for lying on one hand, and weaker motives for adhering to the truth upon the other, I weight up the lighter, yet more desirable scale, by throwing in the expectation of my displeasure, my scornful expressions of disgust, or it may be my infliction of punishment. These new motives I make just so strong as may be necessary to bring the algebraic sum of motives out upon the right side. In no case do we need to suppose the individual a free agent. His actions are determined by the total play of motives in his mind, which motives he can neither make nor alter. But when we hold each person responsible for the consequences of his actions, we introduce a new and useful element into the sum total of his motives. The idea of responsibility then in no way implies the possession of free-will, but only a mind sane enough to foresee consequences and a knowledge that the individual will reap the fruits of his actions, including among these fruits the diminished or increased goodwill of his fellows.

(Chapter XIX.) In the history of its growth, responsibility is seen to be of two kinds, differing in nature and in origin. One of these I shall call *perihestic;* it is the responsibility which grows up round the family hearth and is of a more or less truly moral nature. It springs from the influence excited by the approval or disapprobation of those whom the individual most loves: his parents, his brethren, his wife, his grown-up sons. I shall trace the growth of the family and show how by its constitution it was impossible that the individual could ever grow to maturity without acquiring a strong sense of

responsibility which would, even when not really moral, be an excellent working substitute for true morality.

(Chapter XX.) But this morality does not give rise until a very late date to anything in the nature of law. It produces widespread and remarkably uniform usages. But public law springs from that sense of responsibility which is *aphestic*, that is outside the family. It finds its origin in the feud of family with family, in retaliation for injuries, in arbitration, and in compensation paid to avoid vengeance. I shall show how all recent researches of experts in early law lead to the conclusion that every code was in its origin only a system of regulating the amount of retaliation, or of the compensation whereby war was to be averted. No early public law ever had any pretence of being moral. Its only object was in the easiest way possible to avert disorder and bloodshed. But out of it arose, as I hope to show, the settled usage of fine and penalty, whence came the general notion of public responsibility. This continues in the criminal legislation of our own day. A man is never punished for being a wicked man, but only for having caused or provoked disorder. Laws which thus repress wrong-doing by the fear of punishment never produce a moral feeling, though they may secure a fairly moral conduct, based on quasi-moral motives that are none the less of huge practical value.

(Chapter XXI.) Hence I deduce that the law never gave rise to any moral feeling, but that the moral feeling gave rise to the corresponding law.

(Chapter XXII.) Finally, when it has been shown that morality is the eventual outgrowth of a parental sympathy seen in humble form far down in animal life, it becomes of interest to inquire what this sympathy is. Recognising that it is a name we give to a certain complicated emotional capacity, a power which emotions have of making themselves contagious in our minds, there is no little fascination in an inquiry into the nature of the emotions themselves; and how they come to be thus infectious, so that a man will feel pain in seeing another seriously hurt, and joy in witnessing the delight of a friend.

The connection between emotions and bodily states has

long been known ; but the theory everywhere current is that the emotions are conditions that belong primarily to the mind, which in some way is able to operate on the body, and alter its physiological condition. This seems absurd, for although we know nothing of the real nature of the mind, yet it is impossible to conceive it as the source of a material energy which can open and shut the arteries of the body ; encourage or impede the action of the viscera. Though the law of the conservation of energy is not to be assumed too dogmatically in cases where it has not been proved to exist, yet it raises a formidable barrier to the idea that an abstract something such as the soul can expend material energy. For the energy which moves any organ in the body is derived from the molecular simplification of food stuffs, and how can the chemical energy of food stuffs exist in the mind or be emitted from it ? How even can the energy which releases such energy be so emitted ?

But looking at the question in the converse way, regarding an emotion as a bodily state which impinges upon consciousness, there are no anomalies and scarce a difficulty of any moment to be faced. Sensations and emotions then drop into line with one another. A sensation is a bodily state which, in a mysterious way, as yet utterly incomprehensible to us, reports itself to consciousness. Vibratory affections of the retina of the eye pass to the brain. They disappear, so far as our investigations yet carry us, into a realm of bewildering mystery, but reappear in consciousness as colours, red or yellow or blue, according as the vibrations are slow or fast. So do vibrations of air affect the state of the brain whereby they give rise to sensations of sound, high or low in pitch according to the rapidity of the vibrations. So with each of the senses. They are all, on their physical side, bodily states that give rise to corresponding psychic states.

The emotions differ from the sensations chiefly in being localised in no particular organ. But when the whole vascular tone of the body is heightened so that blood leaves the visceral organs to course through all arteries of muscle and brain and sense-organ, that bodily state reports itself in consciousness as one of the exalting emotions, either

anger or joy or hope according to circumstances. But when the blood-vessels of the surface are constricted, when the blood is congregated in the viscera and no longer courses freely through the muscles, we are conscious of one of the depressing emotions, fear, or grief, or hopelessness, as the case may be. Mind, therefore, becomes the continuous consciousness of sensations and emotions, the former being variations of bodily conditions arising in sense organs, the latter being variations in the general vascular tone of the body. The power of developing these vascular changes must have grown, as I hope to show, in the necessities of animal life. That the sight of its prey should rouse an animal's energies to joyous expectation, the sight of its foe to furious rage, that the voice of its dangerous oppressor should depress it to fear; that the note of its mate, the call of its young one should have acquired the capacity of altering the nature and direction of its energies all were practically essential to the higher animal life. Those bodily conditions, therefore, that correspond to the emotions were of huge preservative value in the struggle for existence, and the nerves of emerging species became more and more susceptible to stimuli which automatically acted in the direction of exalting or depressing their energies.

(Chapter XXIII.) That this is the true nature of the emotions is shown by the action of drugs. Alcohol does not enter a man's mind and thence affect his body. It alters his vascular tone, and thereby produces various emotional conditions. The same view is greatly strengthened by the effects of disease. Those morbid affections of the nerves which stimulate the blood-flow give rise to joyous, sanguine, or irritable moods. Those that diminish the blood-flow are the cause of silent, melancholy states. Assuming, therefore, that the emotions on their physical side are changes of vascular tone, I shall proceed to classify them. I shall first describe the physiological nature of those primary emotions which form a large means of providing for the well-being of the individual. I shall then show that these emotions grew contagious, giving rise to the induced emotions, such as the mother experiences at the wail of pain in her infant, or such as the lover experiences when his offered gift is seen to light

up with pleasure the eye of his sweetheart. All these were of immeasurable value to the community. But sympathy is only a general term we give to that subtle susceptibility of nerve which renders one individual ready to catch the contagion of the emotions of another individual. If all this can be sustained, we shall have traced to its bodily origin that sympathy from whose steady development the moral instinct has arisen.

(Chapter XXIV.) Throughout this book the term moral instinct will never be used to denote an instinct which teaches a man what is right and what is wrong. For there is no such instinct. Ideas of right and wrong vary too radically from race to race and from century to century to depend on any true instinct. We have often to discuss our notions for long generations before we determine what is right, and then the decision is subject to revision and reversal in some succeeding generation. But what we do possess are, first, a set of selfish instincts, which are fundamentally necessary for the preservation of the individual; and secondly, those instincts which I shall call moral, retaining the old significance of the term. These are founded on sympathy, and serve to check and limit the play of selfish instincts in the interests of the preservation of the community, or of the species. The moral instinct, however, is not always right. If, on a wild and stormy night, a man fell overboard, and his friend, though the chance of saving him was extremely remote, jumped in after him, the impulse would arise from a moral instinct, yet it would by no means be right. If I share my dinner with a starving man, my impulse is moral, though my action may not be right; for while I was working hard to earn my dinner, he might have been wasting his substance in drink. As a rule, moral conduct is right conduct; in other words our moral or sympathetic instincts in general impel us to what is for the good of our race as a whole, but not always. Nor is it at all times and in all places equally right to sacrifice the selfish to the moral instincts.

Right conduct in a given period and among a given people, is that which forms between the self-preserving and the moral instincts a compromise such as is reasonable for that time and

among that people. But as the selfish are the more deeply planted, being by far the earlier, we add to the influence of the weaker moral instincts all the weight of our applause. Thus the praise of right conduct is more freely given to the moral than to the selfish action. Each is right in its own sphere, but we need lend no assistance of approbation to the selfish. That assistance we must offer in its fullest strength to the moral. Hence it comes that the moral is in general praised as right, the selfish is either left unjudged or else is condemned as wrong.

But as an absolute and universal fact there is neither right nor wrong. It is a distinction that can exist only in this world, or in such other worlds as may happen to possess animal life of closely analogous constitution. Kindness cannot exist where beings have no needs or pains, nor chastity where there is no procreation by sexual intercourse. If a man lived altogether alone on an island, every impulse of the self-preserving instinct would be right. But when several live in society, the advantages of social life can be reaped only when these impulses are held in check by the moral instinct, that sympathetic control by which a man is prompted to postpone his own good to that of others. This may easily enough swing to excess, as when the mother sacrifices her health to her child's wilfulness, or the husband his worldly prospects to his wife's whims. But right conduct arises from the moral instinct, after due allowance has been made for the reasonable exercise of the self-preserving instinct.

Hence the moral instinct is not an instinct of right conduct, a thing which has no existence, but an instinct, mainly sympathetic, which we find it conducive to man's highest good to encourage, by giving to the actions which it prompts the approving name of right conduct.

CHAPTER II.

THE ORIGIN OF THE PARENTAL INSTINCT.

The Destruction of Life.

It is beyond the power of the most vivid imagination to form a remote conception of the hourly destruction of life that takes place upon our globe. The numbers we may give have no doubt a meaning that is definite enough, and their relations among themselves may be readily grasped; but these transcendent figures are utterly beyond the scope of realisation within our minds. The herrings caught round the British Isles alone amount each year to the total number of the human race. (Mitchell, *The Herring*, p. 14.) But each of these has grown by the consumption of smaller fish and crustaceans for many months before. Of herrings taken at random from a heap, each will be found to have from twenty to seventy smaller animals within it; but if each has grown by the consumption of only one a day for half a year, the herring haul represents an annual destruction of lives exceeding 180 times the number of the whole human species.

Out of so small a sea as the Caspian there are drawn each year 300,000,000 roach and 30,000,000 bream. (Seeley, *Freshwater Fish of Europe*, pp. 148, 213.) The fishermen of New England yearly land 700,000,000 menhadden (*U.S. Fisheries Report*, 1877), and the Canadian fisheries are reckoned to be twice as extensive. The market returns show that even Australia uses 200,000,000 fish per annum, and so at these huge rates, over all the world, consumption goes on. It is a perfectly safe computation that the fish consumed each year, merely as human food, exceed 200 times the total number of our species, and that these have destroyed before

their capture, at least 100 times their own number of feebler lives.

But the human destruction of fish is only the merest trifle in the stupendous sum. A blue-fish (*Pomatomus Saltatrix*) often eats 1000 herrings for a meal, and sometimes great herds of these feast for weeks upon shoals of fish. Professor Baird, allowing each blue-fish but ten herrings or menhadden a day, reckons that 10,000,000,000 are thus consumed for the daily needs of this one species. (*U.S. Fisheries Report*, 1877.) He estimates that each year three thousand million millions of menhadden are eaten by other fish upon the coasts of North America, and this he considers to be less than a fourth of the total consumption of this one species over all the seas. A seal can readily take a bushel of young fish for a day's meal (Professor Rymer Jones, *Mammalia*, p. 176), and this, as I find by measurement, would amount to 1500 if the fish were of the size of sardines. A year's food for a seal must exceed 10,000 fish, and on St. Paul's Island alone, Mr. Elliot estimates that there are 3,000,000 fur seals, besides all the other species less in demand for commerce. The annual sustenance of the seals on this one island would amount to a number of fish quite equal to 20 times the whole human race; and the seals of all the world must therefore consume a quantity of inconceivable magnitude. A porpoise devours about as many as a seal, and the number of porpoises that tumble over all oceans is hopelessly beyond our powers of computation.

When we read therefore of a single huge dolphin (*Orca gladiator*) with thirteen porpoises and fourteen seals in its stomach (Greely's *Arctic Service*, i., 77), we stagger under the effort to realise what a huge procession of creatures must have been distilled in gastric pulp to furnish that one meal to one animal.

But there are whales such as the Common Rorqual whose daily meal is probably more than 500 bushels of fish, or upwards of 7,000,000 per annum to each; and these monsters have been seen in shoals ranging up to 100 in number (Mitchell, *The Herring*, p. 23), while Bishop Stanley has seen ninety-two stranded together at one point upon a shore.

(*Birds*, ch. xviii.) According to the *U.S. Fisheries Report*, 1884, it was estimated that 1000 whales passed each day along the shores of California, and the average for several seasons during which a watch was kept amounted to 30,000 whales all passing one way between 15th December and 1st February. The yearly sustenance of these trooping monsters would be about 150 times as many fish as there are human beings in the world.

In short, a very cautious and moderate estimate will show the destruction of fish by fish within the depths of ocean to be such that if the same velocity of disappearance were applied to the human race it would be altogether wiped out of existence in four seconds.

But fish have other enemies besides the dwellers in the ocean. How stupendous are the numbers of gannets and cormorants, puffins, guillemots, loons, divers, penguins, pelicans, gulls, terns, petrels, albatrosses, and so on, which reap their daily harvest from the sea. Two hundred thousand gannets dwell on the rocky islet of St. Kilda, each consuming, as it has been observed, about five fish daily, or a total for the island of 360,000,000 in a year. But there are thousands of untold cliffs and rocky shores from which, as Brehm tells us, these birds arise in flights that darken the sun. According to Figuier's account the guillemots are in equal swarms, and Darwin considers the fulmar petrels to exceed any other species in numbers. Flinders speaks (*Voyage to Terra Australis I.*, clxx.) of having seen a stream of sooty petrels, 300 yards wide and fifty to eighty yards deep, pass over his ship in unbroken sequence for a full hour and a half. They flew nearly at the speed of a pigeon, and the mariner reckoned there were 100,000,000 in that single agglomeration.

Now, I have watched a dozen of these sooty petrels in the bay below my house for a week together, keeping them sometimes for an hour at a stretch in the field of a glass, and I saw them dip about fifty times an hour, one or other of them. They never failed to bring up a fish at each dive. At anything approaching this rate Flinders' huge flight, when it spread out to feed, must have demanded for a year's supply 1000 times as many fish as there are people in the world.

Audubon tells us that whenever he killed a brown pelican he found about 100 fish in its bag, and white pelicans may probably be reckoned to eat as much. Consider the yearly consumption of such a bird; then turn to Tennent's description of their numbers in Ceylon, or Levaillant's account of the manner in which they swarm on the coasts of South Africa!

Every river, every lake, all the innumerable ponds that sprinkle earth's surface are the scenes of the same process. Within their waters the same cataract of life springs from the egg into joyous light and pours in a ceaseless and prodigious current into the darkness of ravenous maws. Alligators, tortoises, otters, herons, storks, cranes, ibises, bitterns, ospreys, king-fishers, and all the mighty hosts of sharp-eyed birds that night and day watch over the waters of our continents devour the fish in prodigious multitudes. If one reckons the number of drops that cross the brink of Niagara in a second, they do not greatly exceed the number of fish that in the same space of time have descended into the darkness.

Nor is this mighty destruction a thing of the waters alone. Woodlands and meadows, the treeless moorland and the deep thicket witness the same engulfment. A barn owl eats on an average 2000 mice in a year. Lenz reckons that a falcon destroys over 1000 birds in twelve months, while he considers that a family of five mouse-buzzards will consume at least 50,000 rodents in a year, and every hawk requires 2000 or 3000 frogs or creatures of small size for its annual fare.

Of animals lower in scale, the destruction leaves our imagination in abject helplessness. Bishop Stanley (*Familiar History of Birds*, ch. x.) calculates from careful observations that a sparrow destroys about 3500 caterpillars in a week. The chaffinch and the titmouse have been seen to devour at the same rate, while Brehm quotes an observation from which it would seem that a family of three blue tits may in a year consume with ease 1,000,000 grubs. Five small todies, according to the same excellent authority, can destroy 1,000,000 insects in a year. The great majority of the countless species of passerine birds in all likelihood destroy the humbler forms of life at much the same velocity. When we read therefore

of 1,000,000 larks being captured for food each season in one district of France, when we read (Gray's *Birds of the West of Scotland*, p. 122) of flocks containing millions of wax wings, and thence make an estimate of the birds of Europe as running to many thousands of millions, we faintly realise the fact that one continuous and stupendous slaughter is the underlying feature of daily history. If the observations made by Gosse in Jamaica are a safe foundation for an estimate, each small bird demands 250,000 insects for its yearly sustenance. How absurdly low, then, must the estimate be that in every second of time the number of insects which go out of existence is a thousand times the whole number of the human species!

Not to prolong a tedious insistence on numbers inconceivably vast, it is perhaps sufficient to say, that of life a long way above the lowest types—life well developed, capable of joys and pains and well able to enlist our human sympathies, there disappears in a small fraction of the time our hearts require for a single beat a number that far transcends the total of all the men and women that now live or have ever lived in all the generations of bygone history.

Two Paths of Species Preservation.

How then does any given species contrive to exist in face of this universal deluge of destruction? There are but two ways in which the response is made. On the one hand there may be a stupendous fertility, and on the other there may be the development of qualities which procure for the individual more or less of immunity. The former of these courses is in general characteristic of the lower animals up to the level of the fish; the latter is the path of later growth which leads to progress. The former sends its huge armies out into the field, a mighty holocaust from which a few survivors will re-stock the world; the latter sends forth but a limited number, yet succeeds as well by protecting them better.

The average of five authorities gives 27,800 eggs as the

number spawned by a single female herring. (Harmer, *Phil. Trans.*, 1767, gives 29,260; Blanchere, *Dict. des Pêches*, 30,000; Bertram, *Harvest of the Sea*, 35,000; Günther, *Study of Fishes*, 25,000; Buckland, *British Fishes*, 19,840.) According to Buckland, their spawn in favoured rocky bottoms extends in wide layers of six-feet thickness. Full half of these are not fertilised by the male, and a large part of the remainder are devoured by fish, gulls, ducks, and other birds. Such as escape these dangers are hatched in from fourteen to thirty days, but according to Bertram, not more than one-tenth of those that are hatched attain to the age of six months.

And yet the herring is not a fish of any peculiar fecundity. The sprat, the smelt, the grayling, the loach, the whiting, and many other common fish are quite its equal in this respect. Many species deposit over 100,000 eggs to each female, among which, if we quote only familiar names, are the perch, the mackerel, the turbot, the plaice, the brill, the sole, the carp, the gold-fish, the roach, the tench, the bream, the pike, the eel, and the lamprey. A still larger number of species lay many hundred thousand eggs to each female, and others again lay several millions. Of those species in which the female lays more than a million may be mentioned the flounder (1,250,000), the halibut (3,000,000), the sturgeon (3,000,000 to 7,000,000), and the cod (average of five authorities, 6,296,000 eggs).

When the female has deposited her ova, it becomes the business of the male to sprinkle them with his milt. Two-thirds of them fail to be fertilised, and either rot or are devoured. Myriads, though fertilised, become the food of fish or fowl, but if only one per cent. of a cod's eggs are hatched, that leaves the goodly number of 60,000 children to each mother, and if only one per cent. of these grew up to maturity, she would have 600 to take the place of herself and the male each year. It is easily to be seen, therefore, how a fecundity so great responds to the needs that are generated by the mighty agencies of destruction.

Assuming that the average female cod should spawn but twice in her life, she deposits about 12,000,000 eggs; if, of all that number, two should reach maturity to replace herself

and her male when they are gone, the species is kept constant in its numbers. If ten of them survived, the wide ocean would fail to contain the cod-fish after a century, even though they were packed from shore to shore like sardines in a box. If only one survived, the cod-fish would be halved in number every year, and would speedily disappear. How nicely balanced therefore must be the processes on the whole, when neither more nor less than one in 6,000,000 must survive on the average of a period! Any increase provides its own antidote, in the shape of augmenting enemies who multiply with extending food. Any diminution on the other hand in part provides its own specific by starving off the enemies of the race; but this is a more dangerous process, leaving an excess of hungry monsters for a time to hunt with ravenous avidity for the scattered remnants. Many a species must thus have gone out of existence. But as a rule it probably happens with a fertile species, as among ourselves with an infectious disease; though it be stamped out most vigorously, and apparently in all places destroyed, yet it lurks unseen in some favoured spot, some peculiarly sheltered nest, whence by reason of its marvellous fertility it spreads when the right time comes, with unsuspected speed. So it must have often happened that a once extensive species may have been all but annihilated, yet a few in some inaccessible rocky hollow, or at some prohibitive depth, may have contrived to linger on. Then if a few young ones had but a single season of quietness to grow mature, many millions would emerge to roam abroad in search of food. But their enemies being meantime largely starved off, the balance might for a few seasons remain in their favour, so that all seas would again be stocked with their increasing multitudes. Again would their enemies, who perhaps had themselves been close to extinction, reduplicate, and the balance might swing for ages till a sort of equilibrium should be reached.

The species now widely spread must have attained to a very delicate balancing of loss with gain; but there are many which inhabit so limited an area, or so great a depth of the sea, or situations so peculiar that we must consider these to be species rigorously confined to their havens of shelter by

the inevitable destruction which befel them whenever they wandered beyond the bounds of their sanctuary.

There are many species that live in a state of constant fluctuation. Hudson (*Naturalist in La Plata*) tells how, after a few favourable seasons, the mice swarm over the Pampas in numbers that are astounding. Thereupon, all the hosts of beasts and birds which prey on mice increase a hundredfold; they gorge themselves on every hand until the swarms of tiny victims are visibly diminished. Then comes a time of starvation for the plunderers; every mouse is watched with increased activity and snapped up if he dare to venture forth for a mouthful of food. Soon the mice all but fail from the land, and the destroyers languish and decay. Season after season bids the ravagers decline, till, when a fruitful summer comes again, the young mice not only find an abundant food, but prosper in the absence of enemies. Then again they increase with amazing speed, so do their devourers, and the same huge process is renewed.

Naturalists and travellers have noted these oscillations among animals in all parts of the world. But under circumstances that are easily conceivable, a species might readily come to adjust its fertility so as to meet the average requirements; and many naturalists have thought they could actually perceive that this was done. It has often been noted that if a number of grey herons (*Ardea Cinerea*), say fifty couples, have gathered in a community and built themselves fifty nests, in such a case there will be at the close of the season at least 400 individuals to go off upon their emigration. Next season there will appear, not 200 couples, but about fifty, as before; and year after year for half a century the same thing will occur. White, of Selborne, says that however many swifts may have been hatched in a district, there always return next season just about the same number of pairs.

Judging from the experience of fishermen we may conclude that most species of fish are of the oscillating class, though the extreme fecundity of many must secure a rough sort of constancy in their numbers. How great that fecundity is upon the average will not readily be supposed. Out of all the books and serials that have been accessible I have gathered

every case in which the number of eggs has been recorded for a given species. I have thus obtained information for sixty-nine species, and to these I have added the numbers for six Australian species which I have counted in order to widen the range. The average of the whole seventy-five species is 646,000 eggs to each female. These belong to only thirty-five families, out of the 144 enumerated in Günther's book, and so the calculation is nowise exhaustive; but as they are taken from eight out of the ten orders into which he divides all fishes, the number thus arrived at may be regarded as at least an impartial representation, if not one of final accuracy.

The average female fish, having expelled her 646,000 eggs, departs upon her course and may be hundreds of miles away when her progeny emerge. Whether the male follows the female till she spawns, or a little later seeks about through the seas till he finds her eggs, he fertilises them with his milt; and as a rule he too departs, so that when the young ones, a few weeks later, struggle forth into life there is no help, no care, no protection awaiting them. They have to enter upon a world of dangers and take their chance, which, on the average, is a poor one, for out of 300,000 that are hatched not more than one will reach maturity.

Herein arises ample scope for that process which Darwin calls "natural selection" and Spencer denominates "the survival of the fittest". Mere chance will in the majority of cases cause the survival of this individual rather than of that. But in the long run there will be a certain preponderance given to those especially gifted for escape.

Here let me make a distinction which is to be of importance in some of the following chapters, between those whose gift is only a trick, a mere accident which nevertheless is potent for safety, and those which make a true advance in complexity, which make a step, however small, on the path to a nobler type. In the first case it may be only a darker tint, a brighter set of spots, a flatter shape, a more seaweed-like exterior or some such trifle which, in spite of its slender claim to respect, is yet of essential value in securing the survival of a species. Still these things are but side-tracks leading to blind ends; while the other is the high road of development.

If the animal becomes more delicately organised in its nerves, if its sense-organs become more perfectly framed, its brain more efficient as an organ of control, so that all the co-ordinated faculties of the animal work with increasing speed and extent and effectiveness, there is no end to the path of development thus opened out. There is a point of darkness beyond which the darkest fish cannot go, and when a fish is quite flat it can be no flatter. But to nerve development and all the power which brains can give, no limit is apparent, or, at any rate, as will be seen in subsequent chapters, the world is yet very far from having reached it.

In spite of all the objections there are to the increase of scientific words, I propose to call the former course "Dologeny"; it is the process of breeding from the craftiest or most tricky of the race. The latter I shall call "Aristogeny"; it is the process of breeding always from the best, wherein it is to be understood that the best is the individual of completest nerve development.

When the nerve structure has reached the standard of the fish, this second or aristogenic course is never possible unless there arises along with the improved variety some little manifestation of parental care. For it is a corollary from Von Baer's law, that any additional size of brain, and any increased complexity of nerves, will imply a longer period of immaturity. If each animal in its embryonic stage must summarise the history of its race development, it is plain that each addition to the story must, if other things be constant, prolong the time of its helpless growth. But if only one egg in 300,000 is to reach maturity, and all are left to chance, those which take the longest time to develop will not be among the successful candidates. Whilst still in the egg, the superior nerve construction with which the creature would eventually have been endowed will in no way save it from its enemies; and, in general, if it takes but a single hour longer to hatch, its doom is certain, for its average chance is so infinitesimal to begin with, that a trifle one way or the other will carry the decision of life or death.

Hence the survival in the great mass of cases will be dologenic; and thus we can account for a difficulty which is

popularly felt in regard to the acceptance of Darwin's views. If the best fitted to survive come out the winners in the struggle for existence, wherefore should lower forms continue to exist? Why are they not extinct before the superior powers of their more capable rivals? The reason is that the lower forms with their extreme fecundity are well able to hold their ground. For every million destroyed a few survive, and these are enough not only to perpetuate the species, but to make it numerous.

The only effect of the mighty pressure to which these lower forms are subject is to make them breed quite truly. When a species has reached the limit of the trick or accident which secures for it the certainty of perpetuation, it is kept hard up to that limit. The slightest deviation in any individual implies destruction, and change is possible only when change occurs in the circumjacent pressure. The influx of a new sort of enemy may very decidedly alter the character of the individuals that survive; but in the normal case, a species has adapted itself to its surroundings. There is pressure on this side and pressure upon that. The resultant of all the pressures combined leaves the species in equilibrium, but compels it to breed truly, no individual ever surviving unless it possesses the qualities which enabled its parents to survive. In such a case progress is impossible; for it is probable that long ago the race has reached the limit of the trick or dodge by which it learnt to secure its safety under existing conditions.

Value of Parental Care.

This applies, however, only to dologenic variations. The case is quite otherwise when the true aristogenic changes have happened to occur. Once established, they have an endless career, and boundless possibilities, but it is only very rarely that they have a chance of occurring. For no improvement of nerve type will be permanent or of any value which is not accompanied or preceded by the development of parental care. Large variations of nerve complexity are very common in any single species; but, in the absence of parental care, the

process of selection is frustrated. For instance, in weighing the brains of fish a great range of size may be noticed. Take from a heap all the fish of one species that are practically of the same weight and weigh their brains. According to my experiments on many species, one fish will have a brain ten per cent., sometimes twenty per cent. heavier than its fellow of the same weight in this same species. Yet if any such difference is to be truly beneficial, it will not be a question of merely larger or smaller, but will mean an addition of functional power, and this must imply increased duration of the embryonic stage. Yet in a world wherein not one in 100,000 is to reach maturity a quick attainment of moderate efficiency is of more preservative value than a slower growth to higher powers. So the big-brained dog-fish, by reason of slow maturity, may die out, and that of smaller brain survive.

At a certain stage of development therefore we may regard the appearance of parental care as an absolute essential to further progress. But this itself may present dologenic as well as aristogenic forms. The parents which give their offspring the necessary attention in their tender days may do so in ways which are merely tricky and accidental, or they may follow the high road which leads to the perfection of parental love and devotion.

Glancing first at the former, we find many curious wiles and eccentric habits by which here and there a species of fish contrives to defend its offspring. It is very rare that the female is the active parent, but in all the six species of *Aspredo* (freshwater cat-fish from Guiana) the flat belly of the female becomes at breeding time quite soft, like putty, so that when the eggs have been fertilised by the male, by rolling herself upon them she makes them stick to her. There they are carried till hatched. (Günther, p. 160.) So successful is this artifice that less than 2000 eggs suffice for the constancy of the species, while all the nearest species with no such habit require about 60,000.

Among the *Solenostomata* (a genus of pipe-fishes), the female carries her eggs in a pouch, formed by the broad ventral fins which are folded so that their edges coalesce with the skin of the belly. The eggs are extruded into this

secure retreat, which is specially lined with filaments to prevent their falling out, and there they are hatched in comparative safety. In *Doryrhamphus*, the female has a similar pouch upon the breast and belly.

The ten species so included are the only fish in which any sort of care for her eggs is exhibited by the female. But in a very much larger number of cases the male has developed some dologenic contrivance of the kind. This is what we might reasonably expect, for as the fertilisation of the eggs is effected by the male after they have left the body of the female, he is the last to concern himself with them, and any development of parental care is very likely to occur by preference on his side. And then we have to remember that the male must have already arrived at a curious susceptibility of his nervous organism, when the sight or smell of the eggs of his own species and of no others will impel him to shed his milt over them. Species in which this sort of attraction was unusually strong, so as to tempt the male to linger by the fertilised ova, and to drive away marauders, must have had a most decided advantage in the huge intricacy of competition.

This increased strength of attraction induces the male of many species, after having fertilised the eggs, to take them in his mouth and carry them about with him, starving all the time, until they are properly hatched. Two species of the genus *Arius* have this habit (F. Day, *Linn. Journ.*, xv., 38), and so great is its efficiency that from fifteen to twenty eggs to each are sufficient to maintain the numbers of the race. In the Sydney Museum there are two male specimens of an allied genus (*Hemipimelodus dayi*) with their mouths full of young ones, which had not only been hatched there, but had been retained till they reached a considerable size; the fathers in both cases had kept their offspring secure at the back of their mouths though they themselves were being drawn from the water. (Ramsay and Ogilby, *Journ. of Linn. Soc. of N.S.W.*, 1886, p. 17.) Some of the tropical cat-fish have the same habit. Boulenger ascribes it to the genera *Osteogeniosus* and *Galeichthys* (*Proceedings, Zoo. Soc.*, 1891, p. 148), and at least one species of the genus *Bagrus* carries its thirty eggs in its

mouth until they are hatched. Strangely enough, the same custom prevails in a species of wrasse (*Chromis paterfamilias*) which is confined to the Sea of Galilee (Charbonnière, *Bull. de la Soc. d'Acclimatisation*, Paris, 1872), and also in a species of the allied genus *Geophagus* in South America.

Boulenger mentions a somewhat similar custom of the well-known East Indian "Paradise fish". The male, after fertilising the eggs, carries them in his mouth to a little floating nest of air-bubbles which he has already blown upon the surface. In this they lie maturing rapidly under the sunshine.

Almost the whole family of the *Syngnathidæ* or pipe-fishes are characterised by parental care. In a large number of species the male has a long narrow pouch beneath his body formed of overlapping folds of skin. Here he carries the eggs till they are hatched in a wriggling mass, and escape by a narrow opening towards the front. Of the genus *Hippocampus* or sea-horses, all the twenty species have pouches of this sort near the tail, while in another genus *Nerophis* the eggs are disposed in rows upon the breast of the male. In some genera, especially the *Phyllopteryx* or "Leafy Sea-Dragons," the male is accustomed, after the fashion of the female *Aspredo*, to stick the eggs against the soft adhesiveness of the under side of the body, where they remain till hatched. The same habit prevails among the twenty species of *Doryichthys*. (Günther, p. 681.) Buckland (p. 196) speaks of a genus of *Syngnathus* which has cup-like depressions for the eggs, instead of the more normal pouch. In many of these fish the young, after being hatched, have the instinct of returning for several days to the paternal shelter.

But these and similar artifices, though wonderfully efficient so far as they go, are but blind lanes, soon reaching their limit of advantage and offering no means of progress to better systems. There are, however, two much more promising courses, not only efficient in themselves but with great possibilities of expansion. These are on the one hand nest-building, and on the other the hatching of eggs within the body of the female. The latter, as it happens, is the true aristogenic track, but the other has a long career of progress

before it terminates in the beautiful structure and devoted care of a weaver-bird.

The males of many fish make nests for the safe reception of the eggs deposited by the female. Günther enumerates as of this description eight genera, Seeley mentions another, and F. Day three more. Among the most popularly known of these are the forty species which constitute the genus *Cottus;* the male makes a nest round which he hovers till the eggs are hatched; and even then he generally remains near his progeny till they scatter out upon their own careers, defending them, when need arises, with the strong spines which project in front of his gills. Among the lumpsuckers (*Cyclopterus*), of all three species the males make nests, and may be seen to bite with their sharp teeth any creature that approaches. (*U.S. Fisheries Report*, 1884, p. 254.) The young are provided, like the old, with sucking disks by which, at least so it is popularly believed, they attach themselves for a time to their father, who thus bears them far out into deep water. The genus *Antennarius* or walking-fish has at least some species which make nests of seaweed, while the walking-fish of India (*Ophiocephalus*), as well as most species of *Callichthys* and *Doras* (Günther, p. 572), are accustomed to scrape out with their tails very useful sorts of nests in the muddy edges of the tropical ponds wherein they live. There they remain to watch the hatching of their eggs so assiduously that at the breeding season the natives have no difficulty in picking them by hand from the water.

According to Day, *Chironectis* and *Crenilabrus* make rude nests of seaweed, and the favourite Indian fish, the gourami, makes a rough receptacle for its eggs wherein they are hatched under the guard of both parents. The English grayling, as it is well known, scrapes a hole in the gravel and carefully covers the ova with pebbles, while the Australian cat-fish (*Cnidoglanis megastoma*) buries its eggs in a little mound of *débris*. The Australian rocklings (*Genypterus*), according to McCoy, construct a sort of nest, and the Russian fish called the bitski has the same habit.

There are some genera in which the males show their care only by mounting guard over the eggs where they happen to

be laid, though not in a nest. Such is the toad-fish (*Batrachus tau*) (*U.S. Fisheries Report*, 1884, p. 252), and perhaps others of the same genus, as well as at least one species of *Etroplus*. (Day, *Linn. Soc.*, xv., 35.) But this is not so efficient as the habit of nest-building, the great utility of which is well seen in the French artificial imitation of it. In order to multiply the food-fishes, Remy made a box of perforated zinc in which he placed the fertilised eggs, consigning the whole to their natural streams. The signal success of this plan proves the advantage which the nest-building species must derive in the way of immunity from early ravage.

The highest advance known in nest-building among fishes occurs in the sticklebacks (*Gastrosteus*). Their skill and ingenuity have been often celebrated since Coste in 1846 first described them. Yarrell's account and the description quoted by Buckland from the curator of the Norwich aquarium are most interesting, but the best account of all is that given by Kinahan. (*Zoologist*, p. 3526.)

At the breeding season, he says, the male decks himself out in gay colours, and grows combative, the spines on his back often serving to rip open the rival males who approach him. He begins to gather bits of weed, straw, twigs, and leaves. He works them with his tail into a loose circle about an inch in diameter; often weighting them with sand or gravel if the current of the stream is strong. He thus proceeds until he has closed in the structure, rubbing the mucus from his belly against the materials so as to cause them to adhere. After about six hours of labour he goes in search of a female, fights any other male that interferes, drives her into the nest, and keeps her there till she has laid her eggs.

Then begins his long watch, ranging according to temperature from ten to thirty days, while the eggs are being hatched. If other fish, no matter what their size, approach his charge, he dashes at them with his formidable spines, the larger enemies often being blinded by a sudden stab in the eye. When the eggs are hatched, he has an anxious time. The little fry are at first barely visible to the human sight, and as there are only about fifty of them, they have abundant room. A few days however find them much enlarged, and he knocks

down the walls of the nest; then his flock stream forth after him to seek for food. He tries as far as possible to keep them together, rounding them up at times as a shepherd does his flock. This has been observed to continue for six days after the hatching, but then the young fry become too restless; they are hungry and go off after food in various directions, and so it rarely happens that they are together upon the tenth day. The father often loses his life through the rash courage with which he throws himself upon an enemy. All this devotion is not without its result, for while the eggs of other fish hatch out in extravagant numbers only to be devoured in infancy, the stickleback lays no more than from twenty to ninety; and yet it is regarded by many competent authorities as the most numerous of all European fish. On the Continent sticklebacks are caught in prodigious quantities, and squeezed for the oil they contain, the refuse being used for manure. Günther relates that dense columns ascend the Welland at certain seasons, from which men have been known to draw nearly 100 bushels each in a day. Thus it appears how much more efficacious may be some fifty eggs if duly tended, than 50,000 left to all the dangers of chance.

The Viviparous Habit.

Yet there is a still more efficacious course, the true aristogenic path which leads to the noblest types. This occurs whenever the female retains the fertilised egg in her ovary or oviduct till it is hatched, and then extrudes the living young one, already freed from all the dangers of the first and most helpless period. There are about 180 species of fish in which the females are viviparous. In one family of seventeen species (*Embiotocidæ*) well known on the west coast of North America, the males (*U.S. Fisheries Report*, 1884, p. 277) insert their milt into the vent of the female in autumn. It lies inactive for many months, but fertilises the eggs within the ovary in the following summer. These are rapidly hatched, and, as they grow large, they squeeze themselves together, lying alternately heads and tails in little compartments till

extruded. So efficacious is this protection that although each female has never more than twenty young (Agassiz says eighteen to twenty, *U.S. Report* gives fifteen to twenty), these fish swarm in enormous shoals on the coasts of the North Pacific.

The same sort of ovarian gestation is seen in the species *Girardinus*, according to Geddes and Thomson. (*Evolution of Sex*, p. 63.) But in about a third of the species of the same family (the small semi-tropical *Cyprinodonts*) the eggs are not hatched in the ovary but in the oviducts or tubes leading out therefrom. The male is not one-fifth of the size of the female, but by means of his anal fin he is able to insert his milt into the body of the female. In one species (*Anableps*) the young are extruded in a remarkably active condition, so that from the first they are well able to take care of themselves. A few freshwater species of the *Scombersocidæ*, or garpike family, likewise hatch their eggs within the oviduct, and in the family which unites these nearly allied ones, several species are viviparous, notably *Amblyopsis*, the blind fish of the Kentucky caves. The well-known viviparous blenny was described long ago by Yarrell (*British Fishes*, ii., 381) as being most interesting in this respect. At every squeeze applied to the sides of the mother, the sprightly little fish escaped from her to the total number of 100 or 200. The *U.S. Fisheries Report* of 1884 states that twenty-eight species of *Scorpæna* are viviparous, and Dr. Alcock (*Proc. Zoo. Soc.*, 1891, p. 226) has recently made known three species which live at great depths in the sea, whose young are brought forth alive. Many other species no doubt await discovery.

But by far the greatest preponderance of known viviparous species is to be found among fish of the shark order. This is what we might expect, for they are distinctly the most highly developed of all fish. Bastian considers their brain to be the best of all fish brains (*Brain an Organ of Mind*, p. 115); and so far as weight goes, I can certify that while the brains of specimens of nine species of ordinary food fishes, each of a pound weight, only averaged some thirteen grains, those of seventeen specimens of four species of dog-fish

of the same weight, averaged not less than thirty-nine grains; a brain not far short of that possessed by birds of the less intelligent species when they have the same body weight.

Very few of the rays are viviparous, but among the sharks proper (*Plagiostomes*), including dog-fish, porbeagles, etc., McIntosh tells us that all are of this habit except *Scyllium*, *Cestracion*, and *Callorhynchus*. Thus while less than 1 per cent. of fish in general are viviparous, there are no less than 90 per cent. of the species with good brains that bring forth their young alive. If the fish with a brain three times as large as the average of other fishes must take longer to hatch than the ordinary fish, nothing could save it in the egg state and during early life except the protection of parental care. But no form of parental care is so efficient as that which is unconscious and organic, that which leaves the mother no choice, but works out its course independently of her volition. The shark or dog-fish which unconsciously retains her eggs till they are hatched, and then extrudes them as active and even rapacious creatures of fair size, gives her young ones the best of chances known among fish. When we add to this the size and strength, or at least the great agility of the mother, we may readily prophesy that a very small number of eggs will suffice for the perpetuation of these species.

It is not in the least surprising, therefore, to find that in the eleven species for which information is to be had, the average number of offspring is only twenty-four. Some of these fish show a certain amount of conscious parental care. Sir Frederick McCoy (*Prodromus of Zoology of Victoria Decade*, viii., p. 18) says that after the dog-fish of Port Phillip (*Galeus Australis*) has brought forth her thirty to fifty young ones, they swim under and around her for a while, no doubt for protection. Many sharks and dog-fish give birth to one at a time, either every day or every second day for a month or two during the warm season. The highest degree of solicitude seems to be shown in the devil-fish (*Dicerobatis*), which stands between the sharks and the rays. It brings forth a young one every six or eight weeks, and the two accompany each other for several days, the female at that time being considered especially dangerous

and violent. In the shark class Owen detected some sign of a transition to a uterus or womb. In all the lower forms the eggs are produced in the ovary and, when ripe, descend through the oviduct and are deposited. In some early types of viviparous fish the eggs are detained long enough in the ovary to be hatched; in others they are held while descending the oviduct and there develop. In some of the oviparous species a gland occurs in the oviduct, wherein a tough horny spiral capsule is formed round the egg so as to protect it after extrusion. In the majority of species, however, the walls of the oviduct are in one part flaccid and easily distended. There gather the eggs, and there they lie as in a womb until hatched. (*Anat. of Vertebrates*, i., p. 574.) Some species proceed even further. Balfour (ii., 66) tells us that in the female of the hound shark (*Mustelus lævis*) and of the blue shark (*Carcharias glaucus*) the inner surface of the oviduct forms depressions into which numerous raised folds on the yolk-sac are fitted, the whole arrangement looking much like a placenta, its object no doubt being that the germ may use as nutriment not only the yolk of its own sac, but also the transmitted fluids of the mother's blood.

An immense advantage lies along this course of internal hatching. The huge drain required of the female system, when millions of eggs are laid, becomes less necessary, yet on the other hand a large share of the advantage goes to the young. A dog-fish ovary contains thousands of undeveloped eggs. The great majority of these become atrophied, and the nutriment which would have spread among many is in part concentrated on a few. A beneficial compromise is thus effected; while there is less drain on the female, there is better provision for the individual offspring. For, when a million eggs are produced, the nutriment provided for each in the shape of its yolk-sac can be only very minute. The young fish is therefore born of microscopic size, and is accordingly feeble; thus in its growth to maturity it is an easy prey. But if only twenty young ones are to be supplied, each has a large yolk-sac, and it may come into the world perhaps twenty lbs. in weight, as in the case of the devil-fish. (Günther, p. 348.) This represents a very great advantage

in survival. A full-grown cod-fish weighs more than a full-grown dog-fish; yet the newly-born dog-fish could easily make a meal of some hundreds of newly-hatched cod; a good start in life for the one must therefore mean a very bad start for the other.

Add to this that the young dog-fish, leisurely brought to maturity in its mother's oviduct, has become a more perfect nervous structure, and is in consequence quicker of sense, lither of limb, and much more cunning in its brain. No wonder, therefore, that the victory in the struggle goes to the viviparous species, and that the others hold their own by reason merely of an astounding fecundity which makes them the prey of the higher type. They come into the world only to be food, while the larger-brained and almost always viviparous species live long upon them and prosper.

Of species that exhibit no sort of parental care, the average of forty-nine gives 1,040,000 eggs to a female each year; while among those which make nests or any apology for nests the number is only about 10,000. Among those which have any protective tricks, such as carrying the eggs in pouches or attached to the body, or in the mouth, the average number is under 1000; while among those whose care takes the form of a uterine or quasi-uterine gestation which brings the young into the world alive, an average of fifty-six eggs is quite sufficient.

It must hence be very evident how much better are a few that are tended than a great crowd left without care. And the first link in the chain of reasoning of this book is that in the struggle for existence an immense premium is placed upon parental care, and that not until this has been developed can the higher nervous types become possible.

CHAPTER III.

PARENTAL CARE IN AMPHIBIANS AND REPTILES.

Among Amphibians.

A steady diminution in the number of offspring as parental care increases is a prime feature of development. In fish, as already stated, the average of seventy-five well distributed and typical species is 646,000 eggs, but in the class amphibia the average of the twenty species for which information is to be had, is no more than 441 eggs, while in the class of reptiles, the average of thirty-nine species is only seventeen. The birds represent a much higher standard, and they, as the average of more than 2000 typical species, give only a trifle over five eggs per annum for each female. A still higher rank is reached in the mammals; as the average of eighty-two typical species they have only 3·2 offspring to each female every year, and within the mammals as a class the same progressive diminution is to be seen; all the higher orders taken together average only 1·3 young ones each year, while the apes and mankind do not exceed one every two years.

The connection between this decline in the numbers of offspring and the general rise of intelligence is very clear, when we reflect that in the stupendous engulfment of life which the world's daily history presents, only the development of remarkable faculties could save a race from destruction if a single young one each year from each female was its sole reliance. And there is no sort of progress more essential in this regard than that advance of parental care which serves to carry the feeble young ones over their initial dangers.

Strangely mysterious is that nerve susceptibility which accompanies these parental relations. When a male fish,

roving through the depths, finds a mass of eggs on rock or waving seaweed, he is impelled by hunger to eat them if they belong to any but his own particular one out of all the 8000 species of fish; yet if they are of his own species he knows them by instinct, and instead of devouring, he fertilises them by shedding his milt over them. The hen bird which hears the chirp of her emerging chick is moved by a most mysterious nerve thrill, the analogue of that delicious emotion which creeps with inexpressible tenderness through the woman's frame when first the little new-born face buries its softness into her bosom.

In the concluding chapters of this book a rude sort of first approximation will be made to determine the nature of these nerve susceptibilities. But at present it is rather our business, leaving out of count their nature, to show that whatever they may be, they have gradually grown up; and that although the distance is huge between the love of any fish for its tiny brood, and the affection of the human father and mother for the little faces seated round their table, yet there never was any gap throughout the history of life in the development of one from the other; they are still joined along all the line by a chain of subtle intermediation.

But the first step, after we leave the fish, carries us only a little way. For the fish class is a very large one with a wide range of variation within its own limits. The next class, amphibia, is much smaller, and, though higher on the average, it is not higher than the best developed of fish. Indeed, in regard to parental care, the frog, or toad, the newt, or salamander, is only a little in advance of the average fish, and hardly equals the shark or ray. The 1160 species of amphibia start midway up the scale of the 8000 species of fish. None of them have brains to compare with that of the shark.

Yet contrasting the classes as a whole, there is one manifest advance in reproduction that is made by the amphibia. The fertilisation of the egg is always made much more certain than in the case of the average fish. As a rule the male clasps the female for a day or two at breeding time. He squeezes her tightly with his fore-limbs round her body so as to force out the eggs, and as they emerge, he squirts upon them his sper-

matic fluid. In some few species the fluid is expelled before the eggs are extruded, and the female sucks it in with the water through the genital aperture, but in all cases good provision is made for the unfailing fertilisation of the eggs. The nerve susceptibility which thus impels the male is most mysterious in its origin and in its intensity. The naturalist is unable even after the most careful inspection to tell the female of many species from the male without dissection, yet the male frog knows the female, and is attracted to her by an inconceivable ardour, in order to sprinkle her eggs. I have repeatedly pulled from a pond by the hind leg a male frog which was clasping the female. I have thus carried home the pair a distance of three or four miles. I have dropped them into water from heights increasing up to six or seven feet and never once knew the male to let go his hold. Indeed Spallanzani (quoted Letourneau, *Evolution of Marriage*, p. 8) says that under similar circumstances he has amputated the thighs of male frogs without inducing them to relax their grasp. Darwin, on the authority of Günther (*Descent of Man*, p. 350), states that the female is sometimes smothered by the embraces of several contending males, and Brehm says that a single male is often known to squeeze a female to death in his long ardour of two or three days.

Yet the general result must be advantageous, for if it be true, as good authorities estimate, that two-thirds of the eggs of fish rot unfertilised, it must be beneficial if all frog eggs are of necessity sprinkled with milt. Among some 10,000 or 12,000 which I have carried home, and either hatched or observed, I do not remember to have seen one which I had any reason to believe incapable of developing.

In the tailless species—that is the frogs and toads—this mode of external fertilisation is universal: but in the tailed species, salamanders, newts, blindworms, and so forth, the fertilisation is internal, and the young are often born alive. Brehm says that the males of the blindworms (*Cæcilia*) expel the semen into the water near the female, which sucks it into the genital organ. (*Kriechtiere und Lurche*, p. 636.) Balfour gives the same description in the case of newts and salamanders. Several species (*Salamandra maculosa*) are said to

carry the male semen for months before fertilisation takes place. (*Embryology*, ii., 120.) The brothers Sarasin (*Nature*, xxxii., p. 526) describe one species of blindworm as oviparous, but the rest are mostly known to be viviparous, and at least two species of salamander are of the same habit. In *Salamandra atra* the female keeps the young within her body till they have undergone the metamorphosis out of the tadpole stage.

Von Siebold says (quoted by Balfour) that in the salamander large numbers of eggs are formed in the ovary of the female, but that the pair which are the first to descend the oviduct, and are the earliest to be hatched, eat up the others as they descend ; so that this pair when at last born are of goodly size, representing the bulk of some dozens of incorporated brothers and sisters. Not more than one per cent. of the species of amphibia are viviparous as against at least two per cent. of fish. But if the sharks be omitted from the fish, the proportion is not greatly different in the two classes.

Parental care among the amphibia, however, is much more often shown in other means of egg-protection. There is nothing it is true in the way of nest-formation ; the nearest approach being in the case of the newts, in which the female lays her eggs, one at a time, each on a separate leaf of some aquatic plant, folding it up and sticking it together with the viscid fluid which surrounds the eggs. Here the young tadpoles come forth, in no little safety, some twelve or fifteen days thereafter.

But in general, protective care is mostly exhibited in the provision of sacs for carrying the eggs throughout the hatching period. Among the pouched frogs of South America (*Nototrema*) the skin on the back of the female is very loose, so as to form a shallow pouch with an opening towards the rear. The male seizes the eggs as they issue from the oviduct, and after having fertilised them he thrusts them with his hind-foot into this sac. Here they grow rapidly till the back of the female becomes all swollen. In one species (*N. marsupiatum*), when the eggs are hatched into the tadpole stage, the mother seeks the nearest pond, and there her brood

escape to lead their early fish-like life in the water. Other species (as *N. testudineum* and *N. oviferum*) carry the young ones through the tadpole stage, and they never escape from the pouch till they are four-footed frogs. (Brehm, p. 721.) Species of *Opistrodelphis* and *Notodelphis* have the same habit. (Balfour, ii., 121.) In the Chilian species of narrow-mouthed frogs (*Rhinoderma darwinii*) it is the male which has the sac. So soon as he has fertilised the eggs, he stuffs them into a pouch on his throat where they grow and spread down the skin of the belly till the whole under-surface is full of them. (Howes, *Proc. Zool. Soc.*, 1888, p. 231.) Here the young are not only hatched but carried through the tadpole stage.

Some frogs bestow the same protective care without the aid of sacs, by sticking their eggs into their soft adhesive skin. In the Surinam toad (*Pipa Americana* or *P. dorsigera*) when the female has emitted her eggs and they have been fertilised, the male sticks them on her back to the number of about sixty. They seem to be possessed of some sort of irritant fluid, for the skin of the female, smooth before, now begins to grow warty-looking, by reason of the formation round each egg of a thickened skin which rapidly grows over it and forms a pouch for it. During a couple of months the mother lies at the bottom of a pond while her brood are hatched on her back and carried through the tadpole stage, so that when they escape into the water it is as full-formed toads. (Wyman, *Am. Journ. of Science*, 1854, p. 369.) There is a species of *Hylodes* which has the same habit (*Nature*, xix., p. 463), while a West Indian tree-frog (*Hylodes Martinicensis*) lays about twenty eggs on which the female seems to sit, not in way of incubation of course, for her body could scarcely give them any heat which they might not obtain from the air, but merely by way of protection. They are born complete without going through any tadpole stage. The well-known nurse-frog of the Rhine and Rhone Valleys (*Alytes obstetricans*) shows a considerable degree of parental care. When the eggs have come from the female in long strings, like sausages, and when the male has fertilised them, he winds the chaplets round his hind limbs, the number of

eggs being about sixty. He then conceals himself under a stone or in the soft earth, and lies quiet for ten or twelve days till the eggs are nearly hatched. But as the young tadpoles must have their first existence in water, he seeks some pond into which he plunges. (Brehm, p. 732.)

In the case of a Ceylon tree-frog (*Polypedates reticulatus*) it is the female which carries the eggs in somewhat the same manner. She sticks the strings under her body, where they hang in little festoons till hatched; those which form the attachment evidently causing some such inflammatory process as is found in the Surinam toad, for the skin is afterwards marked with depressions where they have been fastened.

Though the exhibition of parental care in amphibians never lies on what I have called the aristogenic track, the road which ultimately leads to the noblest types—though we see few viviparous and no nest-building species, yet such care as we find bestowed is greatly instrumental in reducing the number of eggs that are required to keep the species constant. The average number annually laid by the ordinary frog, toad, or newt cannot be far short of 1000. I have counted the eggs of one species (*Hyla aurea*) and found the average to be for nine individuals 3116 eggs, the greatest number for any one being 5046. Among all the non-parental species for which I have obtained information the number exceeds 800 eggs, yet the average of nine species that show parental care is only twenty-seven. Among the viviparous species the number of offspring declines to ten or less in the year.

Among Reptiles.

In the next class, the reptiles, there is this one great advance, that with a single doubtful exception, the anomalous genus *Sphenodon*, all species have an internal fertilisation of the eggs. *Sphenodon* is an almost extinct genus of two rare species found only on a few rocky islets off the coast of New Zealand. The males of these are said to have no intromittent organs, but except in this one case, all the many thousand species of turtles, crocodiles, lizards, and snakes fertilise the

eggs while still in the body of the female, and before they have descended more than a little way down the oviduct. The subsequent development, while it is analogous to that of the higher fish, is still more directly comparable with the egg-growth of birds. This internal fertilisation does much to account for the smallness of the number of eggs required, though something must be allowed for the fact that the eggs are large and covered with a tough integument, as well as for the instinct universal among reptiles of carefully concealing their eggs.

Yet within the class of reptiles we find great advances as we proceed from one order to another more highly endowed. At the lower end of the series, among the turtles, the fertilised egg is laid quite undeveloped and it takes long and numerous risks ere the young one emerges. At the other end, among the snakes, the egg is kept within the oviduct till half hatched, or three-quarters hatched, or often enough till wholly hatched. Thus with advancing types we have an increasing preponderance of viviparous species, and in the highest forms, the snakes for instance, those species which are not viviparous at least always deposit their eggs in a fairly advanced stage of development.

The lowest order of reptiles undoubtedly consists of the turtles and tortoises. Their brains are small, their nerve structure is only that of frogs upon a larger scale. Among other indications of a humble organisation is the little care bestowed upon their progeny. The female at midnight cautiously crawls up from the river or sea, and scrapes a hole in the sand some two or three feet deep. (Bates, *Naturalist on the Amazon*, p. 287.) Countless crowds of females succeed one another for a fortnight, each depositing her eggs in a sunny place. Having covered them up, the mother departs, taking no further care. But the precaution of sinking the eggs in the warm sand is on the one hand a great protection against many sorts of enemy, and on the other, secures for the eggs that moist warmth so favourable for hatching. If the weather be sunny they are hatched in a fortnight; if cloudy they may take five or six weeks. At length the young break from their shells and push their way up through the sand.

They turn with a strange certainty of instinct for the nearest water, but fall a prey, as they go, to the birds and beasts that have gathered for the festival. Those that reach the water find a host of fish or of alligators waiting to welcome the plentiful repast. One would fancy that perhaps the 112 eggs which appear as the average of twenty-eight species would be too few to replenish the stock. But when once a turtle or tortoise has grown to maturity, there are few animals which can molest it, much less swallow it, and as they live to a very great age, it is possible that the average female may in the course of her life lay several thousands of eggs, so that if one young one in a thousand could reach maturity, the race would probably not diminish.

The habits of the crocodiles are very much the same, but they show a greater degree of maternal attention. Like the tortoises, they scrape a hole in the sand, or in some swampy place in a forest, where the dead and half-moist leaves make digging easy. There they lay their eggs from 20 to 100 in number, and leave them to the heat of the sun. But there is this difference, that in many species the mother either stays near the place or else returns after a week or two, and is not quite forgetful of her brood. Livingstone says (on authority that is second-hand it is true, but corroborated in other ways) that the mother assists her young to break the tough shell, and helps to unbury them from the superincumbent sand. She then leads them to the water, each with its yolk-sac still adhering to its abdomen; apparently she takes some little interest in their first efforts at fish-catching. (*Missionary Travels*, p. 267.)

A careful account of the process is given by Voeltzkow (*Nature*, xlii., p. 376), who describes the Nile crocodile as choosing a place five or six yards from the river's edge, where, by wheeling round repeatedly, she clears a circular space in the midst of which a hole is dug and about twenty eggs are deposited. This is done every morning for four days, the pits being close to one another. From that time forward for about forty days, the crocodile returns constantly to the place, and gives some assistance to the young in escaping from their eggs. Emin Pasha is cautious in accepting this account,

but Bates, a most satisfactory authority, describes for the Jacare alligator (*Naturalist on the Amazon*, p. 316) very much the same sort of assiduity. He tells how, in the midst of a conical pile of leaves, there lie hidden the twenty eggs; with the mother never far off during the time of hatching. He relates a case wherein she lost her life, a jaguar having been able to kill and devour her, seeing that she had been caught so far from her securer element. The account given by Mr. Devenish (*Nature*, 1893, p. 587) shows that in America when the natives rifle an alligator's nest, they always keep a watch for the mother which is sure to be at hand. The complete account given in the *United States Fisheries Report*, 1884, p. 145, leaves little room to doubt that the mothers among crocodiles and alligators show some small degree of solicitude during the hatching period. It is perhaps for this reason that the number of eggs they lay averages little more than half the quantity deposited by turtles, the mean of thirteen species being sixty-six eggs.

Among the lizards, parental care assumes rather the shape of increased development of the eggs within the female, for in almost all species, as Brehm says (*Kriechtiere*, p. 150), "the mother appears to pay not the smallest attention to her eggs, but runs away as soon as she has laid the last one". In the few cases wherein a certain degree of care is shown, we may agree with Bell (*British Reptiles*, p. 35) that "the maternal solicitude is neither very strong nor very enduring". But there is probably more than an equivalent for crocodiles' care to be found in the retention of the eggs within the oviducts until partly or wholly hatched. The lizards thus attain to the level of the highest orders of fish. About twenty-four per cent. of them are viviparous if we include under that term all those species which extrude their young still enclosed in a shell, but so far hatched as to be ready for emergence in a few hours. There are, so far as is yet known, only thirteen species out of 1570 which are truly viviparous, bringing forth their young without a shell, but, although only six species of chameleons are included among these, all of the family are practically viviparous, while in the same way we may classify the whole of the largest family of lizards, the *Scincidæ*, as being

viviparous; for the young emerge from the shell immediately after extrusion.

To be brought into the world of good size, well equipped and active is a very great advantage to the new generation, even though never more than a mere trace of subsequent care is shown by any lizard. Yet the amount of the advantage given may be estimated by the decline in the number of offspring. While the average for the twenty-six species of oviparous lizards, as to which information can be had, is twenty-three eggs, the thirteen species which are known to be viviparous produce only eight offspring on an average; the one set thus requiring just three times as great a fecundity as the other, in order to maintain their numbers.

In the next order, the snakes and serpents, we still find only small traces of advancement in conscious parental care. But the advantage of an unconscious protection is provided in the very much increased habit of bringing forth their young alive. In many species the new-born snake is still enclosed in the egg-shell, but if it immediately proceeds to break the shell and to shift for itself, the species is of course to be classed as practically viviparous. After a long research, I have been able to identify 341 species as being viviparous, and by a coincidence also 341 that are oviparous. Günther, in his preface to Boulenger's *Catalogue of Ophidia* (British Museum, 1893), estimates the total number of species described up to date as being about 1200. No one of course can say exactly how many of these are of the one class, how many of the other, but in all probability we are entitled to say that nearly half of the snakes are viviparous, and that therefore in regard to parental protection this order stands highest of all yet named. The average number of offspring for the whole order is twenty-two as computed from the forty-six species for which numbers could be had. But the number for the non-viviparous species is twenty-three, while that for the viviparous species is eighteen. The reduction is not great; but after all in the snakes the difference between the two sets is by no means vital. All snakes carry their eggs till they are at least half hatched, and of the species reckoned as oviparous a very large proportion lay their eggs

within a few days of the time when the young ones will break their shells. Schlegel says that there is no species of snake whose eggs if examined when newly laid will not be found to contain embryos more or less developed. (*Snakes*, p. 90.) Nicholson (*Indian Snakes*, p. 25) considers that female snakes carry their eggs on an average for about three months, after they have been fertilised by the male; while Brehm (*Kriechtiere*, p. 215) reckons the average to be about four months. But very many of the viviparous species certainly carry their eggs for six or sometimes seven months before the young are expelled alive. The time will be found in accordance with the results of experiments herein afterwards related to depend to a large extent upon the temperature at which the eggs remain.

In countries where snakes are common, the popular belief is strong that they show some affection for their young, but, as one might expect from the length of time which elapses between the fertilisation of the eggs by the male, and the deposition of them by the female, it is the latter only which displays any such care. It is certain that many of the pythons, possibly the whole twenty-one species, incubate their eggs. It is half a century since the *Python bivittatus* at the Jardin des Plantes was observed to coil her body round her heap of eggs in such a way as to completely enclose them. She fasted for five months during and after the hatching process, and when she took her first meal it was whilst she still had the folds of her tail encircling some addled eggs. During the fifty-six days while she lay motionless coiled round the eggs her temperature averaged 41°C., while that of the room was only 25°. More complete information as to the incubation of this class of serpents will be given in a later chapter.

In Australia the two species of the python class (*Morelia*) and in South Africa their analogues (*Hortulia*) have the same habit. In America, where no pythons occur, the nearest allied member of the boa sub-family, the yellow serpent (*Chilabothrus*), is likewise known to coil upon its eggs and hatch them, though, so far as I know, there have been no observations taken of the temperature maintained.

Nicholson says (*Indian Snakes*) that the deadly snake

(*Naja bungarus*) which he classifies as *Ophiophagus* makes a rude sort of nest for her eggs and coils herself round them till they are hatched. But there are few cases recorded outside of the pythons in which this habit occurs; the common-ringed snake (*Tropidonotus natrix*) and the hognosed snake (*Heterodon platyrhinus*) have both been found coiled on their eggs, but in these species this is assuredly not a uniform custom. Those species which incubate their eggs are generally prepared to defend them fiercely, and Mrs. Hopley, in her interesting work on snakes, gives a dramatic description of the maternal courage of the Natal python in the London gardens when the keeper went to remove from her the evidently addled eggs which she had under her.

But there can be little reason to credit the mother snake with anything remarkable in the way of conscious care of her young ones after their birth. On the contrary the description which Brehm gives (*Kriechtiere*, p. 405) of the young viper is applicable to the whole order. "So soon as the little creature has seen daylight, it goes its way without making the slightest claim on the love of its mother, who concerns herself in no way about her brood, and without the exchange of one friendly glance with all its sisters." Many experiments serve to show that the young snake when newly escaped from the shell can kill small animals, its fangs being well supplied with poison and its ferocity being savagely awakened at the sight of mouse or bird. I have several times taken the eggs out of a female black snake (*Pseudechis porphyriacus*) and seen the little creatures strike at my hand so soon as the shell was ripped open. And the same precocity is seen in the rattlesnake. (*Nature*, xxxi., p. 588.)

There is therefore no indication in either fish or reptile, even in the highest grade, of that helplessness at birth which is the concomitant of any notable degree of conscious parental care. That very slowly unfolding maturity, which is essential to the finest nerve-organism, seems to involve an early period of helplessness, which itself demands an instinct of self-sacrifice on the part of the mother. In neither fish nor reptile is there seen more than a primitive indication of anything of the kind; although there is an increasing

provision made for unconscious forms of care which do not involve affection.

Up to this point, the story of development has never a hint of affection, even the humblest glow of maternal love. But now begins the rise of the mother sympathy destined to play so large a part in the survival of the nobler species. In mammals it seems at first to crawl along with incalculable slowness, but in birds, by reason of the greater extirpation of connecting links, it seems to come more rapidly into existence. Yet if we could truly trace the tale of the bygone ages, very slow, of age-long leisure, would appear the creeping growth of those sweeter feelings that alone to our minds render life worth the living.

Nor love nor mother-kindness dwelt on earth.
O'er land and sea, time's vast procession saw
Only the snap of tooth, the gulp of maw;
Nor ever, round the great world's teeming girth,
Had new-born eyes, even in their hour of birth,
Met with a glance of fondness; but the law
Of each for its own greed reigned grim and raw.
Unholy desert! what, amid the dearth
Of all that makes it lovable to be,
What was thy profit of exuberant life?
Till in a fuller time, there stirred in thee,
How faint at first, the mother heart! Then strife
And greed were doomed for some far ultimate day,
When love the lives of all things yet shall sway.

CHAPTER IV.

PARENTAL CARE OF BIRDS.

The Incubating Instinct.

If it be true, as no doubt it is, that both the bird and the mammal are developments from different points in the scale of reptile life, the tracks they have followed are in no respect more divergent than in regard to the kind of care they receive in their embryonic stages. There are reptiles which incubate their eggs, and it is this method of early protective care which the birds have emphasised and brought to the perfection seen in weaver-bird or in parrot. There are other reptiles which bring forth their young alive, and the mammal has perfected this provision, gradually acquiring the habit of attaching the embryo within its own body and nourishing it more and more perfectly with full streams of maternal blood. Both bird and mammal present, as the type advances, a lengthening period of parental protection; but there can be no smallest doubt that the latter is on the more successful track. For the egg, which is carried about within the body of the mother and there developed, secures a larger and slower growth to maturity than that which is deposited and hatched within the most cunningly constructed of nests. Moreover, after birth, the mammal's is the more helpful course. For though the bird may feed her young with extremest assiduity, she has no provision for the full nutrition of helpless infancy that can be compared with the rich flow of milk from distended udders.

Taking first the humbler of the two diverging roads, it will be now our task to follow the growth of parental care along the advancing types of the bird class. They show on the average an immense amount of progress, nor are there

wanting links that serve in a measure to connect the reptile forms of parental care with those of the bird. Still there is also something in the nature of a gap between the two classes; nothing perhaps that can be called abrupt discontinuity, and yet a certain suddenness in transition which we nowhere else perceive in the story of developing parental care. Remember, however, that it is here we cross the borders from the cold-blooded type of animals which take their temperature almost entirely from their medium, to the warm-blooded type which maintain their own characteristic degree of heat, in general much higher than that of their environment.

From reptile to bird there are not now existing any of the transitional forms which we certainly know did once exist. And the reason is evident. For the fully developed bird would be too formidable a rival to suffer the bird of a half-way stage to continue. Equipped only with feathers, beak and claws, the bird might have been but a little the superior of many a fish or reptile; but once it acquired its aërial life, once it could pounce on its prey from aloft, yet secure its own safety in a moment by flight, supremacy was asserted; the wing and the quick pulse of heated blood, that give so full an activity, proclaimed the bird the tyrant of the lower animal world. The humbler forms might survive by reason of ever-increasing fertility, but many an intermediate form must have vanished.

For in the average of cases a species is always most formidable to another species which is much of its own character but just inferior to it in efficiency. The clever doctor who settles in a town may ruin the practice of two or three less competent practitioners, while he will hardly affect the living made by herbalist and patent-medicine man, much less injure those of other callings, the farmer, mechanic, or tradesman out of whom they all desire to make their living. So in the economy of nature. Where you find subsisting side by side, civilised men and uncivilised, as well as mice and rats, the little rodents hold their own, but it is the uncivilised man that disappears before the civilised. He is too near, yet not near enough.

So must a dull and sluggish bird disappear before the

eager competition of a more active bird, although no doubt the frogs that fed them both in the same ponds have contrived to hold their own. This process will not in any way interfere with the continuance of types of varying rank whose paths of life have not led them into competition. Each may fill its own situation whether on sea or in lake; in the desert or the forest; upon the icy cliff or amid the sultry swamp. On its own ground, a species may defy a superior one not adapted to that ground, just as a negro would outlive a Newton in the heart of New Guinea. Nay, even side by side in the same forest two species of birds can well exist, though nearly allied; some adaptation of beak or claw, of tongue or of neck, may enable the lower species to thrive on food which is inaccessible to the higher. Yet all over the world it is true that, sad though the havoc may be which the higher birds commit among lowly forms of life, they are much less likely to extirpate these than they are to squeeze out of existence their own congeners of slightly lower rank.

Thus we may expect a gap to have been slowly left as the birds asserted their marvellous supremacy. Even now it is the clumsy bird of heavy flight which we see exterminated. The dodo and the great auk are gone; the pinnated grouse and many species of partridge are going, while others such as the toothed pigeon are in a critical condition. Survival, therefore, will always have a tendency to run in two opposing lines; it implies either a great fertility which will have the effect of pinning the species down to its existing level and will forbid it all hope of rising, or else a degree of smartness and competency which will diminish the chances of rival forms unless these have some accidental advantage, some dologenic peculiarity of detail, which secures their immunity.

For this reason we find among existing forms a certain gulf between the highest reptile type and the lowest organism among birds. But the palæontologist finds a slow succession of extinct species that in great measure bridge over the chasm of anatomic structure; and we cannot doubt, but that if these ancient bones could hint the full tale of bygone habits, we should learn how parental care had also passed through long and unbroken gradations; that in the æons gone by, there

had been no discontinuity such as the present has to show.

Among existing birds we perceive a general evenness of type which is a prime obstacle to easy classification. Huxley, for instance, finds but one anatomical feature of difference on which to found a truly natural arrangement. Out of 2345 genera (in the *British Museum Catalogue*, new edition to vol. xx., subsequent to that the old edition)[1] there are 2331 which are provided with a keel-like breastbone which is essential for flight; while there are only fourteen genera not so equipped. These are in consequence unable to fly, even were their wings sufficiently developed for the purpose. These he calls the *Ratitæ* (*Anat. of Vertebrates*, p. 233); they are the *Cursores* of Cuvier, and include the ostrich, emu, and other running birds, the New Zealand apteryx being structurally the lowest of the class. But these birds seem to be only the remnant of an order once far more widely distributed. Those which now exist have owed their survival less to inherent fitness than to their great size, all of them, with one exception, being the largest of birds. The kiwi or apteryx, which is the exception, owes its safety to its insular home; for the islands of New Zealand, wherein it dwells, are without a single beast of prey and but little troubled with ravenous birds. Yet in face of the advent of man, it approaches that extinction which has been the fate of the moa or New Zealand ostrich before it. These being dwellers upon earth, have disappeared before the Maori, while birds with active powers of flight have held their own. We are not to be surprised therefore though a gap occurs between reptile and bird; though we find the story of parental development as we read it in our extant species to be not absolutely continuous.

Yet is the discontinuity of progress in this respect far less than we might reasonably expect to find it. The parental care of these lowest of birds is distinctly superior to that of the highest reptiles, yet, as we shall shortly see, it is not

[1] The number of genera in various classifications is very different. St. George Mivart in his *Elements of Ornithology* gives only 1942, a much less number than that mentioned above, but as it is here only a question of proportion, it scarcely matters which system is assumed for comparison.

superior in any remarkable degree. But the connecting link is rather to be found in a somewhat higher family, for most of the birds classed together as *Megapods* deal with their eggs in the crocodile fashion. They choose warm places upon a tropic beach, and there in the moist sand they lay their eggs in holes which they scrape from two to six feet deep. Rapidly hatched in the humid heat, the young lie quiet for an hour or two, then push their way upwards to light and air, which they enter "so fully feathered and so independent that they are capable of subsisting without the least assistance from their elders". (Brehm, *Vögel*, ii., 630.) Mivart gives the same description. (*El. of Ornith.*, p. 8.) That they receive no help whatsoever is the testimony of that most excellent authority, A. R. Wallace. (*Malay Arch.*, p. 398.) But the birds thus poorly furnished with the parental feeling make only four genera out of 2345. They live in comparatively innocuous regions, and are much above the average in fecundity, so that it is possible they are only the remnants in favourable circumstances of a habit once more widely extended.

But if we are to make a methodic examination of the development of parental care in birds, we shall find it profitable to consider them in three progressive divisions: *First*, a grade of inferior intelligence, comprising only the running birds or *Ratitæ*. *Second*, a grade of medium intelligence, consisting of the lower half of the *Carinatæ* or birds with keeled breast-bones, in all, four orders: *Anseres*, the web-footed; *Grallæ*, the stilt-legged; *Gallinæ*, the pheasant-like; and *Columbæ*, the pigeons. *Third*, the grade of superior intelligence, comprising the upper half of the *Carinatæ*, that is the remaining six orders of the *British Museum Catalogue*: *Accipitres*, the birds of prey; *Striges*, the owls; *Picaria*, the woodpecker set; *Psittaci*, the parrots; *Passeriformes*, the sparrow-like; and *Fringilliformes*, the finch-like.

To move from step to step along these three grades is to advance proportionally in parental care. The birds of the inferior grade never make any sort of nest; the medium grade as a rule gather a rough structure of loose materials, while the superior grade exhibit in the great majority of cases a skill which ranges from good to exquisite in the formation of well-

woven cups and domes. True it is, there are not wanting many species of high intelligence which make no nest, but these, like the parrot, have equivalent habits, and show their wisdom, as will be subsequently clear, by choosing homes that are less laborious and yet equally efficient.

In the lowest grade the brooding is the work of the male, and they thus recall the early dawn of parental care. But in the medium grade, it falls to the share of the female, which as a rule is unassisted by the male, though in rather less than half of the genera he takes some small share and shows a certain degree of solicitude. In the superior grade of intelligence, the female undertakes the brooding, but she is fed and tended and occasionally relieved by the male.

Again, in the lowest grade, the young are born well able to shift for themselves; in the middle, they are more dependent, as in the case of duckling or chicken, yet almost always able to run or swim from their birth. In the superior grade, the young are uniformly born in naked helplessness, unable to walk or even to stand, and therefore dependent for every morsel of food upon the self-sacrificing zeal of their parents. They pay for the ultimate activity and competency of their organisms by a protracted time of preparation. In all which, we clearly perceive that increasing complexity is rendered possible only by a developing parental instinct.

Birds of the Lower Grade.

No running bird, neither ostrich nor emu, rhea nor cassowary, makes any pretence of a nest. The apteryx digs a hole in the soft earth, both male and female assisting in the excavation. But so soon as the pair of eggs are laid, the process of incubation is left entirely to the male. (Buller, *Birds of New Zealand*, ii., 311.) Mr. Bartlett observed the breeding habits of the bird in the London Zoological Gardens, and he found that it was the male alone which brooded. (*Proc. Zool. Soc.*, 1868, p. 329.) So also it is the male ostrich which chiefly broods, taking the long night spell, while, as Mr. Schreine assures us, the female takes a shorter spell by day. (*Nature*, lv., 547.) The emu scrapes a hollow in a sandy place, and

when the six or eight eggs are laid in a sage-green cluster, the male sits upon them assiduously for many weeks. Brehm states that "the male takes an active share in the business of brooding" (*Vögel*, iii., 689), but this is much too cautious a statement of the fact. For I am assured by Mr. Le Souef, the director of the Melbourne Zoological Gardens, who, from youth up, has probably had more experience of emus than any one living, that "the share which the female takes in incubation is quite inconsiderable". In regard also to the rhea, or South American ostrich, Captain Musters (*Patagonians*, p. 135) says that the male alone incubates, and this agrees with what Darwin heard from the Gauchos about the habits of this bird (*Naturalist's Voyage*, p. 116), and also with the testimony of Beerbohm (*Wanderings in Patagonia*, p. 52), who states that the male rhea is so assiduous in the duty of brooding that often he sits for six or seven days without rising to feed. Among the cassowaries also the male alone is the incubating partner, as we learn on the authority of Dr. Sclater, who succeeded in making a pair of them breed in the London Zoological Gardens. In all these cases the lowest order of birds recalls inferior types. The hole scraped in the sand is reminiscent of the crocodiles, and the great preponderance of the male parental care is on the one hand analogous to the habits of the fish, and on the other hand a sharp contrast with those of every other order of birds.

And there is no other order that displays so brief a period of parental concern after the birth of the young. The care of newly-hatched emus devolves wholly on the male, the female being quite indifferent to them. But they soon become self-dependent, being little in need of assistance after the second day of their lives. Less than a fortnight after their birth they are absolutely careless of the slender affection of their father. As for the apteryx, Buller tells us that the young ones snap at the finger which breaks their shells for them, and that they are no sooner free than they commence a life of restless activity, seeming little in need of parental help. The evidence in regard to the ostrich is in some respects conflicting. Andersson (*Lake Ngami*, p. 253) tells us that he saw a female ostrich followed by a brood of eighteen young ones

each about the size of a barn-door fowl, while the rear was brought up by an anxiously watchful male. Others, however, give to the ostrich parents a less amiable character, and Brehm from his own observations affirms that after fourteen days the young ostrich can have no need of parental care, being quite active and self-reliant enough to shift for itself. (*Vögel*, iii., p. 698.) Musters tells us that at three days old a young rhea can outstrip a strong man.

But, however active and independent a young bird may be, an early severance from the shelter of parental care is never profitable, and, in spite of the great size of these birds, the broods in their first weeks of independence suffer severely from many foes. According to Musters, the puma, fox, wild-cat, condor, eagle, and larger hawks all levy a heavy toll on young rheas, and the ostrich seems in its early days to fall a frequent prey to the predaceous animals of South Africa. It is only thus that we can explain the need of the great fertility of these birds. The average of the ostrich, rhea, and emu is fourteen eggs to each female, by far the largest of any order of birds, and nearly equal to the average of reptiles. The cassowary in its secluded island home lays but 3·5 eggs on the average, while the apteryx in the security of New Zealand lays four, in two broods of two each. (Buller's *Birds of New Zealand*.) The average of the whole order of *Struthiones* or *Ratitæ* (*British Museum Catalogue*) is 12·5 eggs each year to every female.

Birds of the Medium Grade.

In the birds of a medium grade of intelligence, there is on the one hand a steady increase in the quality and extent of the parental care, and on the other hand a decrease in the number of offspring. The average of the 661 genera is 7·66 eggs per annum. Nearly forty per cent. are like the lowest grade in making no nests; they lay their eggs on sand or gravel as do the grouse, the partridge, the quail, and the plover; or else they hatch their eggs between their thighs on rocky ledges as do penguins and petrels. But the majority make nests which, however rude and poorly formed, are

capable of providing some softness and warmth to the eggs. About eight per cent. have the skill to make a structure of better style, such as the nests of the rail and coot, but in the whole of the 661 genera, there is only one, the sun-bitterns (*Eurypygidæ*), which is recorded to make a nest as good as those which are quite common in the grade of superior intelligence. But the mere fact that sixty per cent. of this lower grade of birds make a nest of some sort, marks a long advance over the average fish, or reptile, or running bird. It may be taken also as a sign of progress that in all these birds without exception, it is the female which chiefly broods. Sometimes the male departs altogether, as in the case of duck or fowl; but in about forty-eight per cent. the male and female sit alternately, although in some cases the male share is only that of relieving the female for an hour or two in the day. There are about fourteen per cent. in which the female alone broods, but the male, as in the case of the stork and swan, remains to feed and protect her. Thus there are nearly two-thirds of the medium grade in which both parents are at hand to help when the young ones break their shells, and the parental care of the whole grade is thus at a fairly high standard, so that a low average of the number of offspring is compensated by the better preservation of the broods.

In this medium grade, we find a less degree of precocity in the newly hatched little ones, yet in comparison with those of the higher grade they are remarkably nimble and well equipped to manage for themselves. It is true that the chicken or duckling requires for a time the warmth and frequent shelter of the mother's wing, yet how active it is from the first! Compared with the young snake, or turtle, or lizard, how dependent, yet compared with the newly hatched crow or eagle, how strikingly active at birth! Among the swimming birds, lowest of the grade, the young are from the first hour able to swim and dive. Slight exceptions occur; the newly hatched cormorant, penguin, or pelican lives for a day or two under its mother's wing before it trusts itself to the water, and the grebes, though able to swim at birth, have to be taught to dive. Yet as a rule the swimming birds are like ducklings, and from the very first day of their

lives may be seen in active quest of food upon the margins of their pond as though they had known a long experience of life. Those swimming birds which hatch their young at an elevation, such as petrels, albatrosses, gannets, puffins, penguins, and pelicans, always feed their young for a week, or sometimes two, either with a fishy oil which exudes from the glandular membrane of their crops, the first appearance of the milky diet, or else with fish which they have partly digested. Among the swimming birds, parental care lasts for two or three weeks, but never more than a month; nor is it ever absolutely essential after the first four or five days. Observe how well a brood of ducklings at a week old will thrive, if the hen which has hatched them should desert her charge.

In the stilt-legged birds, the period of dependence is on the average longer. A few of them, the coots and gallinules, have no sooner broken their shells than they roll into the water and begin to gather their food. A very large number, such as the bustard, curlew, snipe, woodcock, godwit, and sandpiper, are active at birth, running like mice among the grass or brushwood. Yet they all cling for a month at least to their mother's warmth and shelter, and there is a section of this grade of intelligence which approaches the higher birds in the helplessness of its young. The newly hatched heron, or stork, or crane, or ibis is soft and puffy and incapable of leaving the nest. This is probably enough the necessary sequence of the high-nesting habits of these birds; for inasmuch as no birds whatever are born with a capacity for flight, it is clear that when the nests are lofty there will be great gain in a helpless infancy. Without that safeguard the restless young would be tempted to stir about, and their first excursion would be their last. Hence they are utterly dependent on their parents for all their food, and it is a likely thing that elevated nests were concomitant with helpless youth, parental affection, and an increasing scope for the growth of intelligence. But this association, which is tolerably uniform in the superior grade of intelligence, is rare among birds of the medium grade.

In the order next in ascending scale, the pheasant-like birds (*Gallinæ*), nests are always either upon the ground or at

the angle of low branches in a thicket, and the new-born young, as with the chicken or infant turkey, either scamper after the mother upon level ground, or hop from twig to twig, as the chicks of the penelope do, till they reach the solid earth. In any case the young of all species are quick and self-reliant from the first, they gather their own food, yet, as we see in the chicken and the turkey, they remain for a long time with their mother, from six to eight weeks being the rule.

The pigeons form the next order, and show a very decided advance of parental care. The whole order represents the same standard which is reached by only a fraction of the stilt-legged birds, for the young are hatched out in naked helplessness, utterly dependent and passive. Both parents feed them at first with a milk-white secretion, flowing from what Prof. Waymouth Reid has recently shown to be modified sebaceous glands in the lateral pouches of the crop. (*British Association*, 1894.) The fat exuding from these glands appears as a white but viscid fluid which has all the constituents of milk, excepting sugar. This, which is called "pigeon's milk," sustains the young bird for a week or two, and then the parents begin to feed it with seed carefully softened within their own crops. By the time the fledglings are a month old, their feathers have grown, and the parents take them out for a lesson in flying, but when an age of six weeks is attained the young ones are at no loss to provide for themselves.

Birds of the Higher Grade.

And yet this notable degree of parental care is always equalled and generally exceeded among the birds of the superior grade of intelligence. Of 1670 genera there is none in which the young are not the objects of intense devotion. The intelligence of these smart and quick-witted creatures has in truth been built up on a foundation of parental love, without which each new accretion to brain and nerves would have been only a trap for the destruction of the young. The birds, therefore, of the six most gifted orders—the birds of prey, the owls, the parrots, the woodpecker order (*Picaria*), the 507

genera which make up the sparrow-like order, and the 642 which form the finch-like order—all hatch out young ones of abject helplessness, and the continuance of each species is absolutely dependent upon that parental love which is poured out in floods of unmeasured self-sacrifice.

Among these birds the gracious charm of family life is first made fully known, and it is no mere chance that, concomitant therewith, comes that delight in throbbing melody which proclaims the fullest tide of joyous life. In all these genera, with their multitudinous species, male and female unite in their care for the tender brood, and show, as a rule, a steady attachment each for the other. Sometimes the male and female brood on the eggs alternately; while one is sitting the other is not far off; but this occurs only in twenty-eight per cent. of the genera, and these are on the whole of somewhat inferior type. In sixty-five per cent., the female alone undertakes the brooding, but the male is, throughout, her faithful attendant, feeding her assiduously, driving away intruders, and cheering her with the joy of his tumultuous song. In accordance with the teachings of economics, we must regard this division of employment as a sign of progress. It favours not only the growth of soft solicitude in the female, but also that of courage in the male; it not only provides for the perfection of incubation, but it promotes the development of those conjugal ties that are so rich in possibilities. And the whole-hearted union of the loving pair in the care and protection of their young has its ample effect, for we find that, on the average of all this superior grade of birds, less than four and a half eggs per year for each female are sufficient to maintain their numbers.

In every respect these birds occupy the highest level that is reached by incubating creatures. Of the 741 genera which are recorded by leading ornithologists (Brehm, M'Gillivray, Audubon, Wilson, Wood, Buller, Morris, Meyer, Jerdon, Gould, Gray, Coues, Newton, Vennor, Le Messurier, Hume, Sir A. Smith, and A. J. Campbell) to construct remarkably beautiful nests, all but one belong to these birds of superior intelligence. It is true that there are 134 other genera of this more gifted division which make no nests at all, and of these, no less than

eighty-one are to be reckoned among the most intelligent of all birds, consisting of parrots, cockatoos, and owls. Yet in the majority of cases they show their discretion by doing better for their brood than building nests. The cockatoo, for instance, chooses a hollow gum-tree, the roomy interior of which is visible only by a narrow hole; this entrance it enlarges with its beak till just sufficient to admit its body; then on a bed of soft bark-fibre and small chips, it lays its eggs at the bottom of the hollow, in a home of absolute security, seeing that the male is there to guard the entrance. (A. J. Campbell, *Australasian*, 9th June, 1894.) The same sort of adaptive intelligence must be ascribed to the twenty-six genera of birds, which, like the kingfisher, the sand-martin, the bee-eater, and others, dig long burrows in the sand, or even into soft stone, and lay their eggs at the secure end of a three or four feet tunnel. For it is now amply recognised that the practice of nest-building and all its details cannot be simply relegated to the class of inexplicable instincts, but that in spite of its apparent fixity, it is plastic before strong and continuous strains, answering in a dimly reasonable way to the pressure of external circumstances.

Gray, in his *Birds of the North-West of Scotland*, and Bishop Stanley (*History of Birds*) relate many instances of the wisely adaptive alteration of the form, situation, and composition of nests. Curious incidents of the kind are abundant in ornithologic literature, and it is almost always in reference to the most intelligent species that they occur. It is no mere coincidence that the bird which makes the most wonderful of all nests is precisely the one which the Hindoo chooses to train in the way of pretty tricks, the firing of cannon, the kissing of ladies, and ladies only, in a mixed company, and so on. (Jerdon, *Birds of India*, ii., 348.) These weaver birds, as they are appropriately called, construct a most surprisingly beautiful nest, the male without, and the female within, passing the straws and fibres in their plaiting process backwards and forwards one to the other. They thatch a roof or dome, and the male has a room to himself in which to wait upon the female while she broods. A row of thorns, adroitly fixed in the narrow entrance, keeps out the snake and the thievish hands of monkeys.

It is not necessary to assume the action of uniform intelligence in such advancement. A busy brain devises, and the great mass need only enough intelligence to imitate. Thus a clever man may invent the lucifer match, and, a generation later, millions of men that never could have invented one for themselves instinctively feel in their pockets for a vesta when they need a light. So might it easily enough happen that an individual bird which had the wit to lead the way to some small profitable change would alter the habits of a species. Not twenty years ago, the toothed pigeon of Samoa (*Didunculus strigirostris*) was reckoned to be a doomed species. It had nested upon the ground in safety during the long and tranquil centuries of these peaceful islands. The white man, however, introduced cats, which spread in the wild state through the woods, prospering on an easily conquered prey. But when the species had reached a critical point, according to the Rev. J. S. Whitmee, the whole aspect of affairs was changed. The birds adopted the new habit of building rude nests on the topmost twigs of high trees, and the fertility of the species promised to give it a new term of existence. So, also, when Audubon landed on an island at the mouth of the Bay of Fundy, he was surprised to see the nests of some sea-gulls placed on the branches of fir trees, while others were on the ground. The fishermen said that this habit had been formed within their recollection; for originally the birds had built on moss in the open ground, but as the eggs were regularly gathered for winter use, the old birds began to put their nests on the trees in the thickest parts of the woods. Then the young, instead of leaving the nests a week after being hatched, wait until able to fly. (*Ornithological Biography*, iii., 588.) Gould also notices the power possessed by the white-bellied sea-eagle (*Haliaëtus leucogaster*) of adapting its nest to new exigencies (*Birds of Australia*, i., 14), and Romanes (*Mental Evolution*) gives abundant illustration of the same tendency in many other birds.

The same deduction already made from Von Baer's law will demonstrate that these birds of higher intelligence must be of slower growth to maturity than those beneath them in the scale. Their nervous system has a longer distance to

travel. The development from germinal point to full brain size, and to the full intricacy of their complex nerve adjustments, is a longer story and will occupy a greater time. But I find that no part of this increase of time occurs within the egg. For the period occupied in the hatching process bears no relation to the type of bird but only to its size. For further discussion see the appendix to this chapter.

All the additional time required for growth, therefore, will prolong the immature period subsequent to emergence from the shell, and thus we find the rule, so far as I know, quite uniform, that the more highly developed the bird the more helpless its young at birth. All birds of the superior grade of intelligence are born naked, many of them blind, all of them utterly dependent on their parents for support. When the period of incubation is ended, the bird of inferior type emerges in a condition to be fairly independent; but one of the higher type has to pass through an additional period, equally long, of utter helplessness before it can do much for itself. A humming-bird, hatched in nine days, is ready nine or ten days thereafter to leave the nest; a lark, hatched in fifteen days, is ready to fly in a fortnight, and an owl, which takes twenty-one days to hatch, will leave the nest in about three weeks. But always in the most intelligent of the grade there is a tendency yet more to lengthen out this helpless period; a raven or magpie is nest-bound for a longer time; while the parrot, which is very properly described by Professor Rymer Jones as the most intelligent of birds, is born the most immature of all. It emerges from the shell a flaccid mass of bare and formless limbs, from which a gaping beak protrudes. Eight days elapse before it can see, and three weeks before it can maintain its own temperature; nor does it become capable of leaving the nest till the expiration of thirty, forty, or fifty days, according to the size of the species. All this time it is fed and tended and kept warm with a singularly assiduous love; and even when it is able to fly, it is long fed only with seeds that have been softened in the crops of the parents. Figuier asserts (*Reptiles and Birds*, p. 458) that ninety days on the average must pass away before the young one ceases to be dependent.

Among those more advanced birds, we may observe increasing tendencies to the prolongation of family life. The young birds very frequently stay with their parents throughout the year, departing only when the time comes for them to mate and form new homes. That family life, which T. H. Green, in his *Prolegomena to Ethics*, so justly regards as the ultimate basis of moral ideals (p. 257), first makes itself apparent among the birds, but in its lovelier aspects more particularly among these birds of superior intelligence. It is faintly seen in a few fish; it is not wholly absent among reptiles, but it is for the first time distinctly observable among the lower birds, increasing ever as the type advances, till we find the nest-life of one of these higher birds to be marked by many graces of an indubitably moral character. The conjugal tenderness of the mated pair, and their unwearied self-sacrifice in ministering to the wants of their offspring, are ethically beautiful. Where these appear in an equal degree in the human couple, we reckon them as a solid fundamental element of goodness. Much else is required of man and woman, but it is no slight praise to say "he was a kind husband and a devoted father," or that "she was a tender wife and a mother of unwearied love and self-sacrifice".

The family life, which we see so beautifully developed in these birds, is like the seed, enclosing within itself the full potentiality of all the ethic good to be developed in yet later stages, wherein a growing intelligence makes the young always more and more dependent upon family and social union.

APPENDIX.

LAW OF THE PERIOD OF INCUBATION.

The time required for the hatching of the eggs of cold-blooded animals will be shown in chapter xxiii. to depend firstly on the temperature at which they are kept, and secondly on the size of the mature animal. In the case of birds, however, the temperature at which the eggs are kept is practically uniform, and the period of incubation varies only with the size of the animal. The law is that the time is directly proportional to the sixth root of the weight of the full-grown bird. The formula which expresses this relation is that

$$T = 12 \sqrt[6]{W},$$

where T is the time in days and W the weight in ounces.

The following short table will illustrate this relation; those who would wish to see tables more complete will find them in a paper I contributed in 1894 to the *Transactions of the Royal Society of Victoria*, with the specific names in full of 100 birds, and authorities for weight and times.

Bird.	Weight.	Observed Time of Incubation.	Calculated Time of Incubation.
Humming-bird	¼ oz. (E)	10 days (B)	9·5 days
Wren	⅓ oz. (W)	10 days (M)	9·8 days
Swallow	1 oz. (E)	12 days (B)	12 days
Martin	1½ oz.	12 days (B)	12·7 days
Halcyon	7½ oz. (A)	17 days (B)	16·8 days
Goatsucker	2½ oz. (J)	14 days (J)	14 days
Chaffinch	2½ oz. (A)	14 days (N)	14 days
Owlet	4 oz. (J)	15 days (B)	15·1 days
Lark	4 oz. (A)	15 days (N)	15·1 days
Snipe	4½ oz. (J)	15 days (B)	15·4 days
Canadian Grouse	17 oz. (A)	19 days	19·2 days
Woodcock	12 oz. (J)	18 days (B)	18·2 days
Sea-gull	12 oz. (E)	18 days (B)	18·2 days
Pigeon	12¼ oz. (D)	18 days (B)	18·3 days
Piping Crow	13 oz. (E)	21 days (B)	18·4 days
Partridge	1 lb. (A)	22 days (A)	19·1 days
Teal	1½ lb. (L)	21 days (B)	20·4 days
Oyster-catcher	1¼ lb. (J)	21 days (B)	19·8 days
Owl	2⅓ lb. (J)	21 days (B)	21·9 days
Jungle Fowl	2¼ lb. (L)	21 days (B)	21·8 days
Goshawk	46 oz. (J)	19 days (B)	22·7 days
Ibis	3¼ lb. (J)	25 days (B)	23·2 days
Wild Duck	4 lb. (E)	24 days (B)	24 days
Pheasant	2½ lb. (B)	24 days (B)	22·2 days
Snow-cock	6½ lb. (J)	28 days (B)	26 days
Cormorant	7½ lb. (A)	28 days (B)	26·6 days
Stork	8 lb. (L)	29 days (B)	27 days
Peahen	8½ lb. (L)	29 days (B)	27·2 days
Guineahen	9 lb. (E)	28 days (E)	27·5 days
Flamingo	10 lb. (J)	32 days (B)	28 days
Turkey	12 lb. (E)	29 days (B)	28·9 days
Goose	12 lb. (J)	32 days (B)	28·9 days
Eagle	12 lb. (J)	30 days (B)	28·9 days
Vulture	19 lb. (J)	32 days (B)	31·1 days
Swan	19½ lb. (A)	35 days (Be)	31·3 days
Pelican	25 lb. (J)	38 days (B)	32·6 days
Indian Bustard	27 lb. (J)	35 days (B)	33 days
Rhea	54 lb. (D)	39 days (B)	37 days
Ostrich	250 lb. (A)	49 days (A)	47·8 days

Authorities.—(B) Brehm; (Be) Bechstein; (J) Jerdon; (A) Audubon; (W) White; (D) Darwin; (L) Le Messurier; (M) Mivart; (N) Newton; (E) Experiment.

All birds, save only the apteryx, and, if we can trust the received figures, the emu also, agree with the law as closely as we can expect, considering the roughness of the observations on which we have to rely. Most naturalists are content to state the incubation period of a bird in weeks ; a trogon we are told takes two or three weeks to hatch its eggs, and in the case of very many birds, the best information we can get is that they take "about a fortnight" or "about three weeks" to hatch their eggs.

The law that $T = 12\sqrt[6]{W}$ may be simplified to a certain extent. When birds are of the same shape their weight will be proportional to the cubes of their lengths, so that in this case we may write

$$T = K\sqrt{L},$$

where L is the length and K a constant. But this may also be written

$$L = \frac{1}{K^2}T^2 \text{ or } L = fT^2,$$

the well-known equation which expresses a uniformly accelerated motion. It shows us that when any egg begins to hatch, if we regard the process as one of motion outwards from the germinal spot to the periphery, the rate is always the same to begin with, and that however long it lasts it always continues to increase with uniform acceleration. We shall subsequently see that the same law probably holds for the gestation of mammals.

CHAPTER V.

PARENTAL INSTINCT IN MAMMALS.

The Viviparous Habit.

Among the viviparous kinds of fish we perceive the prime importance to a race of the system which retains the egg within the mother till it is hatched. Twenty offspring then can make the race as secure as 20,000 without this provision. So too we can perceive that whenever a reptile is viviparous, it thereby derives two great advantages—first in the lessened number of offspring that are needed, and second in the increased size and capacity of the few that are born.

In dealing now with the mammals, we find that this viviparous habit becomes the normal condition. It is now the newer level from which are to arise long series of upward-reaching types, with provisions of increasing delicacy and efficiency; most notable of these, the system of lactation, unknown in fish or reptile, though hinted at in pigeon and in sea-bird.

Here, as in birds, we find a gap between the reptile and the mammal, and yet it is but slight. It would have been considerable but that in the biologic shelter of Australia there have continued to exist suggestive links of connection. The *Monotremes* now consist but of two genera, every cognate race having yielded long ago to the competition of more capable creatures. Neither platypus nor echidna is favoured with much more than reptilian activity; and both can find their preservation only in an excessive shyness. The platypus dips in silent river bends where a gently spreading circle alone betrays that the moonlit waters have closed over him; for his nest is underground, reached only by subaqueous entrance

from the river bank. The echidna or Australian ant-eater spends his day beneath the sand, into which his shovel-like fore feet enable him to descend with speed; he roams abroad by night licking up the ants from their nests with his long adhesive tongue, but at the slightest sound he rolls himself up in a ball like a hedgehog, and sinks bodily in less than half a minute downward through the sand.

It is in this lowest and most reptile-like order, the *Monotremes*, that we shall naturally look for the first stage in the ascending mammalian scale. In these animals the eggs in the right ovary are all functionless. Of those in the left ovary, two, in the case of the platypus, one, in the case of the echidna, become ripe when about an eighth of an inch in length. They then descend the oviduct to a place where this tube expands into a sort of primitive uterus. Here each of them is covered over with a smooth translucent tunic, and floats in a clear fluid analogous to the albumen of a bird's egg. Whilst the embryo is forming, the egg steadily increases in volume, for after the yolk of the egg is exhausted, this highly nutritious fluid is absorbed through the tunic, and provides for the growth of the embryos, which are expelled either while still enveloped in the tunic or shell, or else as naked little jelly-like masses with short and flexible bills. As a rule, the young seem to be expelled with the dirty grey tunic still enfolding them. (Dr. W. Haacke, Royal Society of South Australia, 1884.) But it often happens to those who dissect out the females of these forms that they find the young disengaged from their coverings some little time before expulsion seemed likely to take place. (Arthur Nicols' *Zoological Notes*, p. 125.)

There is much in this that recalls the reptile type, but while in all cases the young reptile is born active and fully capable of managing for itself, the young platypus comes into the world soft, blind, and only half-shapen. (See figure on p. 25 of Parker's *Mammalian Descent*.) Left to itself it would die in a few hours. But maternal care of a humble sort is present, for the mother has a milk gland on each side of her body, in the depths of a pair of pouch-like folds which she can make by drawing in certain longitudinal

muscles of her abdomen so as to form a hollow in the skin. Into one or both of these she lifts the young with her bill-like mouth. The small creature clings with the claws of its tiny shovel-shaped feet to the soft skin and to the thinly-sprinkled hairs. Beyond this it seems to be gifted with but one other capacity, that of burying its little bill into the aperture at the bottom of the pouch. For the *Monotremes* have mammary glands by no means on the ordinary plan. They have no nipple; Gegenbauer says (*Kentniss Mammarorgane der Monotremen*, p. 33) that, unlike all the similar organs of other mammalia, the milk glands of the *Monotremes* are only modifications of the sweat glands of that part of the skin; Creighton on the other hand (*Physiology and Pathology of the Breast*, p. 112) is certain that, like other milk glands, they are essentially fat glands which are adapted for a period of peculiar activity after the expulsion of the young. However that may be, it is certain that the milky secretion flows out by about fifty tubes. (Owen, *Phil. Trans.*, 1865, p. 673; Creighton numbered 100, and other observers speak of 120.) They all pour their contents into a little areola or cup-like depression of dark but hairless skin, and it is in this little cup that the young animal keeps its beak impressed. The mother, by the unconscious pressure of a pair of slender muscles, causes drop by drop the flow of the milk which is immediately absorbed by the little beak. This milk is poor and somewhat rudimentary compared with that of the higher mammals. (Richard Semon, *Forschungsreisen in Australien.*)

The Marsupials.

The next step in advance most certainly carries us into the order of the marsupials. When the ovum descends from the ovary, it is provided with a comparatively large yolk-sac, from which at first the growing embryo must derive its nutriment as in the case of bird or reptile. (Owen, *Anat. of Vertebrates*, p. 718.) At its appearance in the oviduct, the egg is provided with a rudimentary shell, which, however, soon dissolves away. In the marsupial, however, there occurs none of that connection between the egg and the walls of the uterus

which is so characteristic of the mammalia in general (Balfour, *Embryology* ii., 240), or if any slight connection ever takes place, it is both slender and temporary. (Parker, *Mammalian Descent*, p. 88.) But there is an advanced provision such as is never to be found in bird or reptile. So soon as the embryo has absorbed all the yolk-stuff, the membrane which encloses it assumes absorbent functions, and the fluid which abundantly bathes it in the uterus is drawn in to form a further nutriment.

After a period of hatching, which, size for size, is fairly analogous to the incubation times of birds, though in the main a little less, the marsupial egg is hatched within its mother's womb, and expelled as a little mass of pink, translucent jelly, but with all the tiny bones well advanced in ossification. (Parker, *Mammalian Descent*, p. 63.) The mother gently lifts it with her lips, and drops it into the pouch upon her abdomen, which, hanging from the epibubic bones, is loose and roomy. It is furry without, but within, the skin is soft and greasy to the touch, and, as I have determined by numerous observations, is warmer than any other portion of the surface of the body. From the abdominal walls, there project into the lower part of this pouch the mammary swellings, from which hang long slender teats numbering from two to sixteen according to the species. The embryonic marsupial has but one automatic function to perform. It sucks a teat into its mouth, drawing it down till the tip of it reaches the stomach; then the little creature falls securely asleep. Across the mammary gland of the mother there stretches the cremaster muscle, no thin cord as in other mammals, but a stout band which, by its automatic pressure, squeezes the milk with a ceaseless drip into the little stomach. (Huxley, *Anat. of Vertebrates*, p. 278.)

The young has a special though temporary adaptation of the larynx, by which the passage from the nose to the lungs is kept open, so that, still sleeping and feeding, it may easily breathe the warm air of that secure retreat. So tender is its body, so deep the absorption of the teat, that it is a most difficult thing to detach the one from the other without breaking it in pieces.

So it grows till the fur appears and the claws develop, and at last it gradually relaxes its hold and rolls up snugly at the bottom of the pouch, waking up, however, every ten minutes or so for a small meal of milk. Those who have brought up by hand very young marsupials taken from the pouches of their dead mothers will remember the extreme difficulty of imitating the frequency of those tiny meals. At a certain stage of its growth the young animal pops its head out of the mouth of the pouch, but for a long time it contents itself with a mere inspection of the world without; for it is as yet quite unprepared to run or walk. Yet there is a singular provision for its safety, for if by any means it should fall out, it is always able to clamber back, even while it is incapable of standing or walking. I remember feeding a young kangaroo, not yet able to balance itself. Wrapped up in a warm shawl, placed in a box by a comfortable fire, it never was restful or happy in any such artificial arrangement; but after its meal always scraped about my knees to find a pouch. If I slung the shawl round my waist, like a carpenter's nail-pouch, the little thing would grip the edge with its fore claws, and then, though unable to stand alone, it would vault like a professional pole-jumper, and just clearing the edge of the shawl, would fall to the bottom of the pouch, after which it could be transferred to its box in placid contentment. Without this performance, its happiness was always incomplete. Nicols in his *Zoological Notes* (p. 100) speaks of a young wallaby which could vault with equal ease from his lap into the pockets of his shooting-jacket. It made its habitual lair in the pocket of a lady's dress, from which its little black head could be seen peeping all day long. If taken out it hopped back again with graceful ease.

This life in the warm retreat of a pouch is an immense step in the progress of parental care. Nothing could be more protective to the young, for they spend many months in warmth and security, and with an abundance of the most easily assimilated nutriment. The Virginian opossum carries its ten or twelve young ones in its pouch all over the forest for two months, according to Audubon; for four or five months according to Professor Rymer Jones. A little koala

(*Phascolarctos cinereus*) which I bred in confinement was about four months constantly in the pouch, and, for two months more, retreated thither from time to time. The Virginian opossum (*Didelphis virginiana*) will suffer any torture rather than allow her brood to be touched, and I have several times seen a female koala, in general the most timid of creatures, when a group of children were dancing round her newly-captured little one, descend from her tree, maternal love triumphing over fear, face the crowd and leap into the middle of it, whereupon the young one mounted its mother's shoulder and the two went off up the gum-trees. I remember getting from a boy two young ring-tailed phalangers which I carried home two miles, and placed in a cage in the open air. Every night for a month thereafter their mother came to visit them, and sat all night long upon the cage till I let them go.

Brehm says (*Säugetiere*, iii., 643) that the kangaroo carries its young for six or eight months, but he might have said from eight to ten without exaggeration, for it is by no means uncommon to find a well-grown "joey," as it is called, in the pouch, while an embryo ready almost for birth lies in the womb. This, however, may be in a great part due to self-indulgent laziness of the young rogue; for when the mother, pursued by dogs, and finding herself overburdened with the weight in her pouch, has cast the young one to manage for himself, he can generally give the dogs a good run; often enough he escapes. (Nicols' *Zoological Notes*, p. 106.) The young kangaroo at this age lives on grass, and only spunges for warm sleeping quarters on the good-humoured fondness of his mother, whose patience must seem to us great when we think of the sharp fore claws, and the long spear-tipped hind-legs within the heavily down-dragged pouch. Even when the instinct of self-preservation triumphs over a foolish maternal indulgence, she exhibits the reluctant lingering of devotion seen in the human mother in such a case. G. W. Rusden, in his *History of Australia*, relates how he himself saw a female kangaroo, when hard pressed by the hounds, take a well-grown joey from her pouch and throw it into some bushes, yet when she had led the hunt long miles astray, she

subsequently was seen to return slily in a circuit, place the young one in her pouch and hop away. And yet for all this, there is in the love of the marsupial mother little of that yearning effusiveness so interesting to observe in cow or cat, although there is a certain quiet, dull, inexpansive happiness.

Not all marsupials, however, are upon this level; they show a steady gradation upwards from a standard but poorly endowed. All of them have, so far as is known, the same kind of gestation, their eggs being hatched in a uterus, without attachment to its walls; but when the young is expelled, many species have no pouch in which to receive it. This occurs in the ant-eating species *Myrmecobius*, one of the very lowest of the order, and so isolated that it forms not only a genus, but a sub-family by itself. Then there are *Phascologale*, a genus of thirteen species belonging to the dasyures or carnivorous marsupials; and also one or two species of the American opossums in which the pouch is wanting. (Flower and Lydekker, *Introduction to the Study of Mammalia*, p. 130.) The young of these animals are lifted in the lips of the mother to her teats, which they suck into their stomachs; they are almost buried in the long fur, and hold partly by that and partly by the teat, growing there as does the young kangaroo within its pouch. When sufficiently strong they climb upon their mother's shoulders, and ride securely there, unless when they travel down again to suckle. These amount to some twelve per cent. of the whole marsupial species, and are all near the bottom of it. In seventeen per cent., though there is no pouch, there is a shallow fold of skin sufficient, partly to conceal, and partly to support the young animal. This occurs in *Thylacinus*, the so-called Tasmanian wolf, and its closely allied genus *Dasyurus*, the "native cats" of the Australian colonists. It occurs likewise in both the genera of flying phalangers, *Belideus* or flying squirrels, and *Acrobates* or flying mice, as well as in the genus phalanger or Australian opossums. It occurs also in the genus *Perameles*, known in Australia as bandicoots, but in this as well as in *Dasyurus* and *Thylacinus*, the incipient pouch is turned with its opening to the back instead of to the front. (F. E. Beddard, *Proc. Zool. Soc.*, 1891, p. 140.)

But fully half the marsupials, especially those species which are at the head of the order, are furnished with deep warm, secure pouches of the kind already described. The highest family (*Macropodidæ*), the kangaroos and their allies, represent the terminal point along their own line of progress. They generally have a single young one, very rarely two in a year, yet they hold their own in wonderful fashion. It was noticed in the early days of the colonists that if the dingoes were shot and reduced in numbers upon a run, the kangaroos and wallabies multiplied a thousand-fold in twenty years, so that the grass was eaten by them to the bare earth. Most of the colonial governments had to offer rewards for their destruction; and as many as 250,000 have thus been paid for by one restricted district in a year.

The lower species of the marsupials are much more prolific; and though it is not uniformly the case that where the pouch is good the number of offspring is small, yet a decided majority of cases run that way. There are so many disturbing elements that we cannot expect anything more definite. The American opossums are much more prolific than any Australian species. We understand this when the severity of the winter, and the number of enemies, are taken into consideration. In Australia, the tree-climbing species have little to fear and never have more than one or two young ones in a year, those which live upon the ground more frequently have from two to four. The large species sometimes suffer from drought and dingoes, and Gould relates how he once saw a wedge-tailed eagle persistently watch all day to snap up a young kangaroo the moment it should emerge from its mother's pouch. The experience of squatters with lambs has shown that eagles may easily have been formidable enemies of young marsupials of some species. But as a rule, drought and dingoes and eagles would do little harm to the young of large-sized animals which could be transported fifty miles in a day within so secure a retreat. It seems not unreasonable to conclude that the kangaroo represents in a measure the perfection of that system which makes up for a short and imperfect uterine life by a long period of lactation carried on within a deep and fur-clad pouch.

And yet the marsupials nowhere reach a high standard of brain development. They have been too secure, too little pressed by the struggle for existence. With beasts, as with man, the better qualities come out when danger has to be faced, and whatever be the drawbacks of competition, it at any rate forces a race out of a conservative into a progressive life.

The Placentalia.

And so the mammalia find the upward track in other less sheltered lands. The rodents, for instance, begin the development of the young in the same fashion as the marsupial. The egg descends from the ovary well equipped with yolk, which forms the sole nutriment during early stages of growth. But at a certain point a wholly new expedient occurs. (Dr. Arthur Robinson, *Journ. of Anat. and Physio.*, with which compare Selenka.) The egg, from a disc-like area of its surface, sends out little root-like processes called villi, which extend till they touch the walls of the womb. There they dip into little crypts or hollows, round which are curled the arteries that carry the maternal blood. From the walls of these arteries and their attendant capillaries, the watery fluids of the blood exude into each crypt or sinus as it is called, and the villi or rootlets absorb this nutritious liquid for the use of the embryo. There is no real interchange of blood. It is not truly the mother's blood which courses in the veins of the embryo; no corpuscle is transferred; the young animal has to make its own corpuscles then as always throughout its life. All that the mother does is to supply from her blood a richly nutritious fluid which the young one absorbs as its food.

Each of the orders above the monotremes and marsupials follows this order of development, though with manifold divergencies of detail. As the area of attachment between fœtus and uterus is called the placenta, these higher orders of mammalia are known as the *placentalia*. According to Balfour (*Embryology*, ii., 227), they are all derived from ancestors, whose eggs, like those of the marsupials, were possessed of yolk-sacs sufficient to provide for all or nearly all their growth until expulsion. But the yolk-sac, as we ascend

in the scale, plays always a less important part, till, shrunk to that inconsiderable form known as the umbilical vesicle, it merely in the early days assists the process of direct absorption through the membrane of the fœtus until the placenta or attachment area has been completed. (Michael Foster, bk. iv., chap. iii.)

But likewise as we move upwards, we find the provision for this attachment of fœtus to uterus walls increasing both in regard to the area of contact, and to the complexity of the union. (Balfour, *Embry.*, ii., 260.) The lowest of the placentalia seem to be the Insectivores. In the mole, the shrew, and the hedgehog for instance, the yolk-sac is large and is not exhausted till near the close of fœtal life, the small extent of placental connection being only an aid, not the chief support. Neither the edentates nor the bats are much in advance, but the rodents present a superior type both in regard to the increased area of contact and to the more intimate complexity of that contact.

A consideration of the nature of this contact will lead to a division of the placentalia into two great types, the deciduate and the non-deciduate. In the former, the egg, on the one hand, grows shaggy with multitudes of villi which reach out to penetrate the womb, and, on the other hand, the walls of the womb prepare themselves to receive these villi, growing thick, soft, and spongy, and closing round the villi so as to embed them in a fleshy mass. This thickened skin does its work of nourishment till the embryo is expelled; then it peels away from the inside of the womb, forming the "after-birth," whence the name deciduate.

But among the non-deciduates, there is no such elaborate response of the walls of the womb to the needs of the villi. In the pig, for instance, each villus is only a simple rounded projection which pushes its way into a hollow in the uterine wall. In the ruminants the shape of the villus is much more elaborate, but there is the same comparative simplicity in the vascular structure of the walls. These do not materially add to their thickness, and do not to any considerable extent fall away when the fœtus is expelled.

Of these two classes, the deciduate represents the aristo-

genic track; it leads steadily up to the highest types. But the non-deciduate reaches a point of considerable perfection in its own line. The whole of this division is of a singular uniformity of level, the linking species of bygone ages having probably met extinction in the competition with the finest races of their kind. All the terrestrial animals of the non-deciduate class are herbivorous, including the families of the hippopotamus, peccary, pig, camel, giraffe, chevrotain, deer, ox, antelope, goat, tapir, horse, and rhinoceros. The marine members of the group form the two orders of the whales and dugongs.

Non-Deciduate Placentalia.

These animals, forming the great orders of the ungulates, the whales (*Cetacea*) and the dugongs (*Sirenia*), exclusive of only two families, the hyrax and the elephant, agree among themselves in many peculiarities of detail. Their period of gestation is remarkably long, ranging from 150 days in the sheep, goat, and ibex to 280 days in the cow, bison, stag, and yak. It would seem to be roughly proportional to the sixth root of the weight, but it is in all cases five or six times as long as in bird or marsupial of the same weight, and twice as long as in the carnivores. Thus a lion and a stag are of approximately the same weight, but the one has a gestation of 110 days, the other of 280 days; the wolverene and the sheep are of about the same weight, but the one carries its young only ninety days, the other 150 days; the polar bear, 440 lbs., takes 210 days; but a horse of the same weight would take 330 days, and so on. (See Appendix B to this chapter.)

The effect of this long gestation period is to bring the young one into the world in a remarkably complete condition. Contrast the young rodent, carnivore, or monkey with the calf, the kid, the lamb, or the fawn. The young of all the deciduate group are born feeble, helpless, incapable of maintaining their own temperature, while the young of all this non-deciduate group in an hour or two after birth can trot at a fair speed alongside of the mother, and have no need to be

covered over by her to secure their body heat. This is all the more remarkable inasmuch as their temperature is high, the average of twenty-four species for which I can find records being 39·08° C., and it nowhere else occurs among the mammalia that young, born at such a temperature, are capable at once of maintaining it for themselves.

Not without value therefore is the exceptionally long gestation period of the non-deciduates. And in other respects also they are singularly well fitted for survival. They are all of very considerable size, and almost all of a speed unapproachable by other land animals. Out of their fifty-one genera, no less than forty-three are provided with formidable weapons, such as horns, or tusks, or the ripping nose-horn. Of the eight genera not so protected, some, like hippopotamus, camel, giraffe, and tapir, are too large to be readily molested; others, like the horse and llama, are too swift to be easily overtaken. Some secure immunity by their fearless life on the ledges of the dizzy precipice, some by dwelling in the depths of tropic rivers; some defy their foes amid dryness of the desert, others in the plashy marshes of the tangled forest.

But all these equipments for survival find their efficiency doubly and trebly assured by a strength and devotion of parental affection almost on a level with the highest display of this quality in birds. Nothing will induce the ungulate mother to abandon her young, and Galton (*Inquiries into Human Faculties*, p. 75) declares from his own experience that a newly calved cow is almost more than a match for the lion; and the males of all these animals, though they rarely fondle the young as the mothers do, are generally ready to exert themselves furiously in their defence. The result of all these provisions is seen in the surprising smallness of the number of offspring. More than ninety per cent. of these animals have only one offspring to a female each year. The swine are a strange exception, the number of their young being about ten, and the water deer (*Hydropotes*) is also singular, having about five each year. But the average of the whole group is only 1·22, a number which of itself declares that the maternal relationship is here of a high order.

And this maternal relationship, though it may spring from a basis of physical needs on both sides, is the source of many charming capacities of affection destined in other races to lofty developments. These physical needs depend on the fact that the young, though so complete in other respects, are quite unable to live on the same class of food that their parents require. They are born with inadequate tooth supply, and their digestive organs are incapable of deriving nutrition from grass or leaves. But in the mother's organism, after the fœtus has reached a certain stage in the womb, a strange reflex action begins to develop the mammæ or milk-secreting organs. By a mechanism to be described in the last chapter but one of this book, the sympathetic nervous system, taking its stimulus from the altered condition of the womb, presides over a slow but continuous change in the fat-secreting glands of the mammary regions, and when the young one is expelled, the womb no longer needing its previously large supplies of blood, shrinks back into inactivity, while the same nerves of the vaso-motor system which shut off the blood supply from the womb, turn it on to the mammæ. From that time forward the mother gives consciously her nourishment to the young one just as she had formerly given it unconsciously. Her udders are now full of nutriment, just as her womb had formerly been, and she craves for the lips of her offspring to relieve their distended condition. Through a dozen ducts, prolonged into the projecting nipples, the rich fluid, holding in solution sugar, and in suspension fat globules and the cheesemaking albumen called casein, pours as a flood of nutriment into the delicate stomach. And yet, if the relationship on both sides were wholly of this selfish kind, its efficiency would be greatly lessened. If the mother had no thought but the emptying of her udder; if the young had no feeling but that of hunger, the process would fail in much that now contributes to its influence. But the maternal and filial relations foster the growth of emotional conditions such as are eminently favourable to the emergence of higher types. Not only do the nerves of the senses grow more delicate to the touch of fainter stimuli; but the nerves that control blood currents in what will be shown to be emotional channels become more and more

susceptible to stimuli, and those forms of susceptibility are preserved and emphasised which have any tendency to secure the maintenance of the race. The stimulus therefore of the sight, scent, and voice of its young one has a marked effect upon the organism of the mother, dissolving her in emotion, and promoting the flow of milk to her udders. On the other hand, the manner in which the offspring keep by the side of the mother, even when in no need for food, their instinctive crouching close to her at the appearance of danger, their eager answer to her call if by any chance separated, all show that emotional bonds as well as physical exist for them as for their mother.

The hoofed animals (*Ungulata*) do not form the entire body of non-deciduate placental mammals. There must be added the *Cetacea*, whales and porpoises, and also the *Sirenia*, dugongs and manatees. These remind us of transition-forms long vanished from the earth, which led up to the ungulates. We see in the marsh-loving tapir and the river-frequenting hippopotamus an indication of transition to a purely aquatic life. Whale, porpoise, and dugong show in completed form a similar transition of bygone days, but they branched off from an earlier stem. They are truly placental, for the whole of the egg-membrane, except the two ends, is covered with projecting villi that dip into the walls of the uterus, but the general arrangement of the connection is more elementary than in the other non-deciduates, whilst in the mammary provisions they are strongly reminiscent of the earliest form. Von Baer (quoted Creighton, p. 103) declares them to be even of the monotreme type in this respect. It is true that the Cetacean has a projecting nipple, and in so far differs from the monotreme, but according to Dr. D. Hepburn, the nipple is not only disproportionately slight, but it lies wholly concealed in a slit-like aperture instead of standing out from a prominent udder, as in other mammals. ("Mammary Gland of Gravid Porpoise," *Journal of Anat. and Physiol.*, xxviii., p. 21.)

Nevertheless, the emotional display in the relation of mother and offspring is not greatly inferior to that of the ungulates. Scammon describes the satisfaction with which the whale rolls over on one side to let her calf suckle in full

ease; and Beale, who as a surgeon for many years in whaling ships had ample means of observation, states that if a young one be attacked, its mother will stay by its side, urging its flight and assisting its escape. On the other hand, if the mother be killed, the young one will follow her carcase for many hours after her death. (T. Beale, *Nat. Hist. of Sperm Whale*, p. 51.)

Deciduate Placentalia.

But the deciduate division of the placental mammals represents the last and highest branch we have to follow. They begin with the Insectivores, the mole representing the lowest type of this class of placenta. Then come the rodents and the bats. (Balfour, ii., 241.) Of the 230 genera composing these orders, all that have been fully examined show a comparatively large yolk-sac for the early nutrition of the embryo, but soon there appears a disc-like area of villi dipping into the walls of the womb, which over that limited area becomes extremely vascular, thick, and soft. "The intermingling of the fœtal and maternal parts becomes very close" (Balfour, ii., 242), and the discoidal placenta thus formed falls away soon after the expulsion of the fœtus. The same description is applicable to a majority of the edentates; the armadillos and sloths which constitute nine out of the fourteen genera of this ill-assorted order being similar to rodent or insectivore; but the scaly ant-eaters are non-deciduate, while that monstrosity called the aard-vark or Cape ant-eater goes rather with the group to be next described.

In all these animals the scale of intelligence runs from moderate to fairly high. Their period of gestation relative to their size is long compared with that of marsupial, short compared with that of ungulate forms, being rather more than double the one and less than half the other. (See Appendix B to this chapter.) In all cases the young come into the world quite helpless. The mother prepares in good time a nest or sheltered lair wherein she may cover her little ones. In all the Insectivores the young are born naked, blind, and deaf; and the mother suckles them and tends them during a relatively long

period; a period in excess of the time of care shown among birds of the same size. The young require three weeks before they can stand or walk, and at least a month before they can properly maintain their specific temperature. Among the *Cheiroptera*, or bats, the female is said (Vogt, *Mammalia*, i., 99) to form a sort of pouch with her curved-up tail and its attached membrane. Into this the young one drops at birth, but it has strength enough to climb by the hair of the mother's body to the teats upon her breast, and there it clings for several weeks, tenderly suckled and protected.

Among the rodents there are wide variations, from the guinea-pig which comes into the world already furred and with open eyes, prepared to reach maturity in six or eight weeks, up to the beaver, which is long dependent and does not attain to its full size for a couple of years, remaining in the parental lodge until its third summer. (L. H. Morgan, *The American Beaver and his Works*, p. 36.) In the squirrel, rat, marmot, and generally the larger part of the rodents, the young are born blind, but their eyes open when they are from three to thirteen days old. Their fur generally begins to grow soon after birth, and is a fairly warm covering before a fortnight is over. The young mouse, as Aristotle long ago observed, is able to shift for itself in about fifteen days; the rabbit or hare is suckled for three weeks; porcupines are suckled for a month, according to Buffon, but remain with their mother some time later.

Of the orders thus united by the possession of a small disc-shaped placenta, all are more or less diminutive; the very largest being less than a small sheep, while the great majority are smaller than a hare. There are none of them formidable, even though the rat and the mole are fierce, and the hedgehog, porcupine, and armadillo are defensively armed. Their main security lies in hiding; they never move far from their lurking places, and such speed as they may display is always subsidiary to the instinct of concealment. Their rate of propagation is therefore generally high; the average of rodents being 11·1 young per annum; of the insectivores 11·4. The bats though feeble have the immense advantage of an aërial life; yet it is hard to understand how this alone could account for a fertility

so low that most species bring forth but a single young one in the year and none of them more than two.

A second sub-group of the deciduate placentalia consists of the carnivores, the elephant, and the anomalous little pachyderm called the hyrax. These all start with a yolk-sac of fair dimensions for the early nutrition of the embryo; then they form a disc-like attachment after the fashion of the last group; but steadily this spreads till it surrounds the whole egg in a broad ring or zone of villi, dipping in very intimate union into an exceedingly vascular wall. Each villus branches out, and every branch contains its own little artery and its little veins, the whole embedded in the tissue of the mother wall through which the blood flows, coursing freely in arteries and capillaries that curl round and round each rootlet, while through their porous coats the life stream soaks to nourish the young one. The thickened wall thus formed is no essential part of the mother's ordinary structure. Having served its special purpose it falls off and is expelled.

This is on the whole the most complete maternal provision we have yet reached in our upward course. That of the ungulate or non-deciduate group is in most ways fairly to be compared with it, inasmuch as though their placental system is not so fully adapted to minister to the wants of the embryo, yet the period of gestation is long, and the one advantage may be regarded as the equivalent of the other. But apparently the balance in some way lies in favour of the deciduate group, probably because the long period of nurture which its young enjoy makes up for a shortened gestation, and the promotion of emotional life which accompanies a conscious protection may be more than an equivalent for the extra security of a mechanical and unconscious protection. But any diminution in protective efficiency must be slight, for this group of the zonary deciduates consists practically of the carnivores whose means of defence must make their young unusually secure.

The comparison leads us into some uncertainty, for while we have seen invariably along all the line that an increase of intelligence is accompanied by a decrease in fertility, it is not so when we compare the carnivores with the ungulates. The latter, as we saw, average 1·22 young per annum, but the

carnivores on the average of thirty-nine species produce nearly four. Yet there can be no doubt that these are the more intelligent order of the two. They include the cat tribe and all the dogs, the bears, civets, racoons, weasels, badgers, otters, seals, and walruses, and if we add the elephants, as the only important family with zonary placentas outside of the carnivores, we have a group whose brain development exceeds the best we have yet discussed.

But it is easily to be conceived that stern necessity may have compelled the ungulates to a long gestation, not to produce a more intelligent type, but merely to place in the world a well-matured offspring. If there ever had been races of deer whose fawns were born as helpless as a kitten, they must have perished off the face of the earth as the carnivores became stronger and more rapacious. The species whose young were soonest ready to trot by their mothers would survive, and in their case the struggle for existence would render it of the utmost importance that the mother should carry her young till it was of the greatest size compatible with her own safety at its birth. In such a case those races would be favourably situated which produced but the one offspring at a time.

No such necessity urged the carnivore. There is no danger to the tiger-cub in its being born blind and helpless. The mother can afford to have three or four at a time, small and imperfectly developed, for she has both the power and the will to protect them. The fawn, the calf, the kid fall a prey to her wily strength, but her own young ones are inviolate.

In proportion to their size the carnivores have a gestation period no more than half the length of that uniformly seen in the ungulates, but the elephant, though of zonary placenta, seems to be in many respects of the other class. Its gestation period greatly exceeds even that of the ungulate; it has but a single offspring in five or six years, and the young are born in a condition to trot about as though long experienced in the ways of life.

But on the whole we shall not be wrong in assigning to the carnivores the higher place in regard not only to intelligence but also to parental care. In every case a long period

of suckling is followed by many months of family life in which the mother delights to have her young ones around her, encourages their games, and fiercely protects them from all danger. The she-wolf suckles her cubs for eight weeks within the lair, but though they then go abroad with her, she suckles them for a couple of months longer, and until they are nearly a year old they are her constant companions. Equally solicitous is the mother fox, or hyæna, and all the feline race are more devoted still. The she-bear appears to find an inexpressible delight in her three or four naked little cubs which remain blind for at least a month. Long after that time, however, she confines herself to the den, keeping them warm, suckling them, sporting with them, her autumn fat supporting her so that she need never quit them an instant. (Vogt, *Mammalia*, i., 207.) The weasel and the badger are blind for a fortnight, and stay within the mother's nest for two months; the otter, according to Buffon, is dependent on its mother for nine months, and the racoon, according to Vogt, for a full year.

Seals also are most affectionate mothers, and in an immense herd where acres of rock are a moving mass of bleating young ones, each mother recognises the cry of her own; her satisfaction is great if it comes to "nose" her; then she turns over to give it suck. (*U.S. Fisheries Report*, 1884.) The elephant is also of an extreme maternal devotion. Sir Emerson Tennent in his classic work on Ceylon observes that the smaller herds as a rule consist of a mother and her four or five successive offspring, while Blandford, a most competent authority, states that a herd killed at Kokai consisted of a female and her four young of various ages, a fact which would indicate a very long period of maternal care. (Blandford, *Geology and Zoology of Abyssinia*, p. 359.) Andersson relates both of the elephant and of the rhinoceros (*Lake Ngami*, p. 389) how tenderly affectionate are their motherly instincts, and how pathetic it is to see a young one haunting for days the spot where its mother has been slain.

The Monkeys.

Finally we have to turn down that branch of developing

maternal provision which leads through the lemurs and monkeys to the apes, and culminates in mankind. These still belong to the group of deciduate placentalia. But they present, in the unconscious provisions of maternal care, the two advances of the *decidua reflexa* and the *chorion frondosum*, as well as a very great proportional increase in the period of gestation. As regards the conscious provisions of the mother after the birth of the young one, there is a lengthened period of suckling, combined with an intensity of affection exceeding any as yet described. The *decidua reflexa* is first met with in slight and primitive form among the rat family and some of the insectivores, but it attains a large development only at the level of the apes. It is a long fold of the walls of the womb which forms a capsule for the ovum, embedding it securely in anticipation of subsequent changes. During the first fortnight of development, villi grow out over the greater part of the surface of the chorion or enclosing membrane so thickly that a fœtus removed at this stage appears as if covered by a shaggy fell. This, however, ceases to increase on the lower parts round which the *decidua reflexa* is wrapped. On the upper end of the womb, these villi, to use the words of Balfour (ii., 246), "become more and more complicated and assume an extremely arborescent form," giving rise to the *chorion frondosum*. They dip far into the walls, and each terminates in a sinus or reservoir into which the "curling artery" of the mother's womb pours the nutritious fluid. The villi hang freely in this fluid; each of them has a vein and an artery "connected by a rich anastomosis of ramifications" into which the maternal fluid soaks to be thence drawn into the fœtal circulation. It is clear from the works of Turner, Huxley, and Balfour that the connection of the tissues of the mother and offspring is more intimate and highly developed in these quadrumanous and human species, than in any other animals.

Add to this that the period of gestation is the longest known, and we certainly recognise the highest standard as yet developed in this earth of ours of that unconscious preliminary maternal care which can do so much to render possible the loftiest types of intelligence. The monkey, even the little

macaque, according to Flower and Lydekker (*Study of Mammalia*), carries her young for 196 days. This is four times as long as a cat, six times as long as a hare is gravid, and seven times as long as any bird of the same weight would incubate her egg. We may reasonably suspect some mistake or exaggeration, yet it remains true that for a monkey the period is of extraordinary length. An ape takes longer than the largest bears, and as long as the largest ruminants, the period being twice as long in proportion to its size as in any other animal, save only the horse and the elephant. In mankind there is again an increase in this period of gestation in comparison with that of the highest apes.

The lemurs and other prosimians form the link that leads from rodents and insectivores to this highest group. They have no *decidua reflexa*, though in essential features adumbrant of the final system of placenta. As we should expect from their position, relatively low, though with the promise of great things to follow, their young are born able to see, and not altogether naked of hair. In all cases they climb immediately after birth up the mother's body to her teats, which are situated on the breast.

This pectoral situation of the teats, rare in lower forms, but uniformly characteristic of all the quadrumana, except the one species which is lowest of all, is well adapted to utilise the protective care of the hands, which now, for the first time in our upward review, form the termination of the fore limbs. The fond mother is able to carry her little suckling in loving arms, and clasp its head to her bosom. The American monkeys (*Cebidæ*), the lowest of the quadrumana, in spite of a long gestation, bring forth their young in a somewhat immature form. As they dwell only in tropic forests, little provision needs to be made for their warmth, but they are carried continuously in the mother's arm, she employing the three other limbs in flight or in the search for food, while the little one never for a moment in its early life leaves her breast. When it is old enough it climbs upon the mother's back, where it lives for months, still suckled from time to time in indulgent arms. Even when well able to shift for itself, it returns to suckle or to ride on the maternal shoulders. By

degrees the life of the family becomes merged in the life of the tribe, and the young derive the advantage given by the protection of the united males.

The Old World monkeys (*Cercopithecidæ*) display the same class of provisions, but in accordance with their greater intelligence, maturity is still longer in arriving. Small as a macaque or entellus monkey may be, it is not mature till the age of four or five years. It is suckled quite twelve months, and, long after that, is watched over with some degree of maternal care. The method of carrying the young in the arms brings us back to the level of protective care seen in the marsupial pouch, but then the young monkey has had six times as long a gestation, and a very much superior opportunity of development during that period. And the conscious care of the subsequent time is very different. As Vogt says (*Mammalia*, English trans., i., 44), "The monkey brings up her young very much in the same way as man, often with excessive tenderness and care, shown especially in combing, currying, and searching for parasites. Males and females defend the young with bravery, but box their ears or cudgel them, if they have failed to render obedience. They lead them about in their tender years, and afterwards guide them in climbing, running, and leaping."

But it is only in the anthropoid apes that everything points most conclusively to the coming perfection of parental care in the human species. All the details of propagation are for the first time entirely similar. The male organs are entirely analogous, and in the female there is seen the first indication of the menstrual flow. (Hartmann, *Anthropoid Apes*, p. 191; compare also Bland Sutton's observations, *Journ. of Anat. and Physiol.*, xxvii., p. 372.) All the details of placenta and of milk-gland are for the first time entirely analogous, and the parental care that is exhibited approximates closely to that of the savage man. There is within the ape family, as everywhere else, a certain degree of gradation, but in the lowest genus, the gibbons, the young ones cling to the mother for seven months, then gradually merge in the family life of the tribe. (Prof. Duncan, *Cassell's Nat. Hist.*, i., 78.) Prof. Rymer Jones, however, asserts that they do not reach maturity till

the age of ten, while Hartmann places it as high as fourteen or fifteen years. (*Anthropoid Apes*, p. 255.)

The young at birth in all apes are taken into the arms of the mothers, and there clasped with a fond pride; the sight of maternal tenderness in gibbon or chimpanzee is a touching one, the long hand of the mother stroking back the shaggy hair of the brow, while she looks down with yearning affection into the liquid depths of the brown eyes, is suggestive of the world of melting sympathies dawning there, but rising towards their meridian in a nobler species. Bock, in his book on Borneo, declares that the gibbon washes and dries the face of her offspring. Next to the human babe, the infant ape is the most helpless of all new-born creatures; most helpless, that is, if we consider the length of the period of helplessness. Wallace draws a striking contrast between a young macaque he had, and an orang-outang of the same age, the monkey full of life and activity, while the orang lay upon its back utterly helpless, being scarcely able to guide its fingers to the grasp of any definite object. (*Malay Arch.*, p. 45.) Yet his experience, as well as those of Müller and Schlegel, show that at a comparatively early age the young orang is quite able in an instinctive way to take a tenacious hold of the hair on the mother's bosom, and to cling there unsupported. Though helpless, therefore, it is not nearly so helpless as the human infant.

Wallace speaks as if the family life of the orang were very incomplete, the male taking no share in the defence of the young, the group as a rule consisting of a female, a half-grown young one and an infant, the father rarely participating in the fortunes of mate and offspring; and Lieut. Crespigny (Roy. Geog. Soc., 1872) gives an account entirely corroborative. Rajah Brooke (*Journals*, i., 221) relates how he killed an adult female with one young one at her breast and another a year or two old by her side, from which it appears that the young stay long with the mother. But the latter authority asserts that the male makes a kind of staging of boughs and leaves on which the female sits to suckle her young, while from another similar resting-place he watches over the safety of the family (i., 226). Du Chaillu (quoted Brehm, *Säugetiere*,

i., 82) asserts that the chimpanzee has the same custom. Whatever doubts may exist as to the attention paid by the father, there is none as to the devotion of the mother. Prof. Rymer Jones (*Mammalia*, p. 16) relates a pathetic experience of a Captain Hall who shot a female orang, and saw her spend her failing strength in setting her little one in the way of escape, after which she herself turned round to await her destiny, but even then with a frequent anxious glance at the progress up among the foliage of the small creature that was her all on earth.

But if the paternal affection were dubious among the other apes, there seems little room to doubt its existence in the highest species, the gorilla; for in this case the few authorities in whom we can trust invariably describe the family group as consisting of an old male, his consort and their offspring. (Hartmann, *Anthropoid Apes*, p. 232.) Koppenfels states that the first family he saw consisted of the parents, a young one about six years old and an infant of less than a year. "It was touching," he adds, "to see with what loving care the female tended her baby." (Brehm, *Säugetiere*, i., 67.)

There is no occasion for surprise, therefore, when we find that these are the least prolific of the animals we have considered. Even the prosimians, though sometimes with two or three young per year, are almost uniformly confined to one, and the monkeys, excluding the marmosets, which form an intervening family, are absolutely uniparous; nor do any of the lower apes ever exceed one offspring to the year, while the higher apes, whose young are not born in any determinate season, appear from all that is known to have an interval of much more than a year between the birth of one offspring and that of the next.

Mankind.

Of essentially the same type, but still more completely elaborated, mankind stands at the head of this highest group, foremost in all respects. The period of gestation is in proportion to size the longest known (see Appendix B), the union of maternal and fœtal tissues is the most complex; yet, after a

long period of the most perfect nutrition, the babe is born by far the most helpless of infant creatures, requiring a full year of growth ere it can stand or walk, eight years at least to make it capable of managing for itself, and twenty years for maturity.

There can be little reason to doubt that all this deliberate progress to maturity is dependent on the greatly increased nerve complexity, whose foundations have to be deeply laid from the beginning. Muscle is easily superimposed in subsequent years, and it bears in the infant a much smaller proportion to the whole body weight than it does in the adult. But the new-born babe has a brain more than eight times as great in proportion as the adult (Foster, *Physiology*, bk. ii., chap. v.), and the rest of the nervous system has no doubt more or less of analogous excess. And after all, this nervous system, in the most essential way, *is* the animal; it is the expressive outline which may easily be filled in; it is the basis which settles the design, and all else grows up around it in accordance with that design. It is this nerve elaboration which demands time for its growth; a contractor will build a huge factory in six weeks, but if it be a palace he is to build, of mingled elegance and stateliness, he may require a year for the foundation alone. Somewhat of the same deliberate preparation appears in the growth of the nobler animals.

The babe is born with a brain which averages one-seventh part of its body weight. Dr. Sharpey's figures give 14 oz. as the average of the brain, while Devergie (*Médecine Légale*, i., 279) gives 6½ lb. as the average weight of the whole body. Nothing like this proportion is found in any of the lower animals, but while the body of the child is multiplied in weight some twenty-fold at maturity, the brain is little more than doubled. And yet all this brain development at birth is accompanied by nothing in the way of intelligence; the new-born babe is incomparably less intelligent than the duckling fresh from the shell or the calf but newly dropped. The brain at this early age has great potentialities for the future, but no actual working power. So truly is it like the foundation which makes no appearance above the surface of the earth. But on that splendid basis the years are able to build a mighty superstructure.

And yet our fancy may proceed too fast, for when we cross the border into the confines of the human race, we have first to deal with the savage of Negrito, Bushman, or Andaman type, wherein the brain, though much above that of the highest apes, is by no means the wondrous organ it is subsequently to become. Accordingly we find that the babes of these races are not nearly so tender or so delicate to nurture as those of civilised man. I have heard travellers among the blacks of Australia describe how infants of a week old are laid in perfect nakedness on the sand, to endure, it may be, a scorching sun and plague of flies, or, it may be, bitter wind and a shower of rain. They come unhurt through an ordeal that would be certain death to the infant of a civilised race.

Nevertheless the amount of care which even the naked savage mother takes of her child exceeds that of any lower animal. It is perhaps the purest joy which is known in savage life, that emotional play of feeling when she folds the little head to her bosom, and feels its lips draw at the maternal stream; when she fondles it, coaxes from it the first laugh, and teaches it all the little triumphs of baby life; when she assists its first staggering steps and exults in its early attempts to frame the tribal syllables.

True to the general rule, we shall here discover on the one hand a diminution of the number of offspring, and on the other an increase in the period of maternal devotion. The savage mother does not on the average reach the rate of one child in two years, a number which steadily decreases as the type is raised, until among civilised people, as statistics show, the average is now scarcely one in four years.

The time during which the babe is suckled by the savage mother exceeds any lactation period yet mentioned; the average being over two years. In Featherman's five large volumes of anthropologic details which he calls *Social History of Mankind*, I find scattered here and there the suckling periods given for twenty-nine races. They vary from one year to four, but the average is 2·4 years. I have gathered from the works of twenty-three travellers the corresponding periods of the native races they were familiar with; these range from one to four and a half years, and the average is 2·6 years. We may

therefore fairly reckon about two and a half years as an average. If this to our ideas appears excessive, we are bound to remember that the savage babe has no such gradual transition in its nutriment as we provide for our children. It must go straight from the mother's milk to half-cooked meat and uncooked roots, for its mother has no utensils in which to gently stew the tough food that is the daily fare of the tribe. The more civilisation prevails, the less need is there for the heavy strain of long nursing. Farinaceous foods and cow's milk, with broths and ripe or well-cooked fruits, are then at hand to form, after the first year, a more than satisfactory equivalent.

But the infant savage must depend on milk alone, and Livingstone tells us (*Miss. Travels*, p. 126) that the Bechuana mothers not only suckle their children to the age of two or three years, but that he knew of cases wherein the grandmothers encouraged the long discontinued flow of their milk in order to give plenty of sustenance to the big grandchildren still fed at the breast. The Koran (chap. ii.) directs the Mohammedan mother to suckle her child two years, but this is a brief period compared with the time allowed in many races. Dr. Robert Brown (*People of the World*, iv., 95) says that it is often enough possible to see in savage life a child of five or six years old stand by its mother's side and drink from her breast. Karl Bock (*Temples and Elephants*, p. 261) says that among the Lao people it is not uncommon for a boy or girl to drink from the breast and then receive a cigarette to smoke. Meyer, Grey, Brough Smythe, and other authorities as to the Australian races declare that it is a usual enough thing for healthy boys and girls of five or six years old to leave their games and scamper off to suck their mothers' milk.

Travellers generally remark upon the extreme patience and kindness, not to say foolish indulgence of savage parents to their children. The question of infanticide is one to be dealt with in the following chapter, but if children are suffered to grow up to a month or two old, they almost invariably secure an extraordinary hold on the affections of their parents. In the lowest forms of savage life, but for this redeeming feature, human nature would look in the main a selfish and sordid

thing. It is in love for the children, concern for their sufferings, delight in their sports, that the more beautifully human features begin to display themselves. Lessons of self-sacrifice are first learnt in the tenderness that overflows at sight or voice of the little ones. Herein lies the earliest fount of moral feeling, a very slender thing at first, but destined to grow through all the stages of developing fulness that will occupy the remaining chapters of this book.

So far as we have gone, we have seen that in the fierce competition of the animated forms of earth, the loftier type, with its prolonged nervous growth, and consequently augmented period of helplessness, can never arise but with concomitant increases of parental care. The advance from order to order is gradual, and it culminates in mankind, whose helpless babe must have perished had not the species acquired alongside of its nerve development, and, in a sense also, by reason of it, an emotional tendency keeping pace with other lines of progress, with uterine intricacies of nutrition, with perfection of lactation and the lengthening of its period, with refinements of organism such as would render the adult a victor, but the infant only a victim if it were without an abundance of loving assistance.

The fount of milk which the mother bears for the nurture of her babe is not more automatic in its action than the fount of maternal feeling which bids her yearn over it, which lacerates her heart to see it dying, and gladdens her life with its laughter. She is no more responsible for the one than she is for the other. Both are biologic features which slowly grew up as the indispensable adjuncts of increasing complexity of type. But the fount of milk has seen its perfection and done its work as sufficiently for the carnivore or for the ruminant as for the woman; as sufficiently for the negress as for the highest European types. Not so with the fount of parental emotions. What they are in ruminant or carnivore only leads up to higher conditions in the ape, and thence to still higher in the savage races of man. At this stage they widen and deepen, they branch in all directions, and out of them grow, as the sequel will show beyond a doubt, all the varied virtues which form the great pre-eminence of man.

APPENDIX A.

The following table gives the rate of propagation of the different orders of vertebrate animals; save that, in the fish, two are omitted for want of information. The rise in the scale of intelligence is, in a general way, accompanied by a manifest decline in the number of offspring; and this decline, as has been shown, must coincide with the development of parental care if a race is to survive. In the later chapters of this book, I hope to show that this parental care is due to increasing capacity for emotion, which in its turn is due to a growing delicacy of nerve organism that augments the susceptibility to certain classes of external stimuli.

	Young per annum.
FISH.	
Cyclostomata	average 200,000
Plectognathi	,, 117,200
Physostomi	,, 230,900
(Parental Species only 1500.)	
Anacanthini	,, 1,070,000
Pharyngognathi	,, 583,000
(Parental Species 20.)	
Acanthopterygii	,, 572,000
(Parental Species 356.)	
Ganoidei	,, 6,000,000
Chondropterygii	,, 26
(Almost all Parental.)	
AMPHIBIA.	
Anura	,, 900
(Parental Species 35.)	
Urodela	,, 250
(Parental Species 16.)	
REPTILIA.	
Chelonia	,, 100
Crocodilia	,, 67
Lacertilia	,, 17
Ophidia	,, 23
AVES.	
Struthiones	,, 12·5
Anseres	,, 4·4
Grallæ	,, 4·7
Gallinæ	,, 9·2
Columbæ	,, 3·8
Psittaci	,, 4·4
Picaria	,, 4·3
Fringilliformes	,, 5·4
Passeriformes	,, 4·1
Striges	,, 6·1
Accipitres	,, 2·6

MAMMALIA.

	Young per annum.
Monotremata	average 2
Marsupiata	,, 3·4
Edentata	,, 2·3
Insectivores	,, 11·4
Rodentia	,, 11·1
Cheiroptera	,, 1·2
Sirenia	,, 1·4
Cetacea	,, 1·2
Ungulates	,, 1·2
Carnivores	,, 4
Prosimia	,, 1·2
Quadrumana	,, 1
Mankind	,, ·5

APPENDIX B.

PERIOD OF GESTATION.

It has been shown that the incubation period of birds is proportional to the sixth root of the weight of the mature bird. In regard to the gestation period of mammals the same law holds good as the first of two relations, the second being that for marked increases of intelligence from order to order there is a lengthening of the period. But within the same order, and more accurately within the same family, we find the equation hold true that

$$T = M \sqrt[6]{W},$$

where T is the gestation period in days, and W is the weight of the animal in pounds, while M is a constant for the order or family, but varies from one order to another, increasing with the increase of intelligence. As an example take the following list of the carnivores for which the equation is

$$T = 41 \sqrt[6]{W}.$$

	Weight in lb.	Authority.	Time Calculated.	Time Observed.	Authority.
Cat	6	Experiment	55 days	55 to 56 days	Mivart
Wild Cat	16	Brehm	65	65	Brehm
Lynx	18	Brehm	66·5	70	Brehm
Chaus	15	Brehm	64·4	70	Brehm
Leopard	150	Brehm	94·7	90	Brehm
Puma	160	Experiment	95·5	96	Brehm
Tiger	332	Brehm	108	100 to 105	Brehm
Lion	490	Jerdon	113	110	Average of 7
Weasel	½	Experiment	36·5	35	Brehm

	Weight in lb.	Authority.	Time Calculated.	Time Observed.	Authority.
Ferret	1½	Experiment	44 days	42 days	Vogt
Otter	19	Flower	67	63	Brehm
Pole Cat	6	Experiment	55	55 to 60	Brehm
Wolverene	96	Brehm	87·7	90	Vogt
Marten	8	Brehm	57	63	Brehm
Badger	44	Brehm	77·1	84 to 105	Brehm
Racoon	15	Cyclopædia	64·4	63 to 70	Brehm
Brown Bear	550	Brehm	187	180	Vogt
Polar Bear	800	Vogt	199	210	Brehm
Land Bear	440	Brehm	180	180	Brehm
Jackal	22	Brehm	68·7	63	Brehm
Wolf	80	Brehm	85·2	70	Landois
Fox	16	Brehm	65	63	Landois

Similar tables of satisfactory approximation may be made for rodents and ruminants. In the cases of other orders, information is scanty, but such as is to be had is in general consistent with the law suggested. (See for fuller particulars my paper in *Transactions of Royal Society of Victoria*, 1895, p. 270.)

But the quantity M, which for birds is nearly constant, alters among the mammalia from order to order, increasing with increase of intelligence. The following table will show the kind of variation to which it is subject:—

For Marsupials	M is	18
,, Insectivores	,,	25
,, Rodents	,,	35
(But for Leporidæ M is 24.)		
,, Carnivores	,,	41
,, Artiodactyls	,,	80
,, Perissodactyls	,,	108
,, Proboscidea	,,	139
,, Apes	,,	120
,, Man	,,	126

PRELIMINARY TO CHAPTER VI.

THE CLASSIFICATION OF MANKIND.

In many of the chapters that follow, man in his upward career is the leading theme. At each stage of the progress of the various elements of sympathy, the recital of the races that stand upon each particular grade of advancement would lead to a hateful prolixity; yet the omission of names or the insertion of one or two only as specimens would produce a vague unsatisfying effect. Therefore I have made the subjoined classification as a preliminary, founded, however, in no respect upon racial affinities or pedigrees, but only on the general standard of intelligence.

Savages.

Deriving their food from wild products of nature; therefore always thinly scattered and in small societies; their lives engrossed in the constant struggle for sustenance.

Lower Savages.—Dwarfs in stature; pot-bellied and spindle-legged; woolly-headed and flat-nosed; wandering in families of ten to forty; without dwellings, and with only a trace of clothing; with the smallest cranial capacities of all mankind. (Flower, *Anthrop. Inst.*, xviii., p. 72.)

Including—

Bushmen (South Africa), average height, 4 ft. 8½ in. (Schweinfurth).

Akka (Guinea Forests), average height, 4 ft. 5 in. (Schweinfurth).

Negritos (Philippines, etc.), average height, 4 ft. 6 in. (Earl).

Andaman Islanders, average height, 4 ft. 7½ in. (Flower).

Semangs (Malay Penin.), average height, 4 ft. 7 in. (Wallace); 5 ft. 1 in. (Bradley).

Veddahs (Ceylon), average height, 4 ft. 8 in. (Bailey).

Kimos (Madagascar), average height, about 4 ft.; now extinct (Little).

Scanty aboriginal remnants of this dwarf negroid description are found on the west frontiers of China (Lockhart, *Ethno. Soc.*, i., 178), in Formosa and Hainan; also in Madagascar. (Little, p. 51.) Flower states (*Anthrop. Inst.*, xviii.) that similar populations linger in the innermost forest ranges of Borneo, Sumatra, Celebes, Flores, and Ceram. The females of these races are often under 4 ft. in height; Emin Pasha measured a full-grown female Akka under 3 ft. 10 in., and Barrow, a Bushman woman, the mother of several children, who was under 3 ft. 9 in.

Many travellers assert of these people a striking ape-like appearance, and Earl states that the pelvis of the female resembles that of the anthropoid apes. But all such statements are to be received with caution, the wish being too often the father of the thought. There can, however, be no doubt that they are the lowest of human species. Yet they are acquainted with the means of procuring fire; with bow, arrow, and spear, and they all use rudely-fashioned hatchets.

Professor Kollman (British Assoc., 1894) showed that dwarf races of this class, averaging in height about 4 ft. 8 in., prevailed throughout Europe some thousands of years ago. The evidence, though far from complete, is at least suggestive that a race of this sort formed the early human indigenes of all the Old World.

Middle Savages.—Range up to average human height; of finer physical aspect; dwellings only screens against the wind; use of clothing known, but nudity common in both sexes; canoes rudely fashioned; weapons made of wood and stone; wander in tribes of 50 to 200; without ranks or social organisations, but tribal usages have the force of law.

Including—

Tasmanians	5 ft. 4 in.	for men.
Australians	5 ft. 5 in.	,,
Ainus of Japan	5 ft. 2 in.	,,
Hottentots	5 ft. 3 in.	,,
Fuegians	5 ft. 1 in.	,,

Macas and other forest tribes of Brazil and Guiana.

Higher Savages.—Except in frigid zone, are of average human stature; dwellings always made, though in general only tents of skin; clothing always possessed, though nudity common enough in both sexes; good weapons of stone, bone, or copper; wander in tribes of 100 to 500; incipient signs of rank, chiefs have an ill-defined authority, but tribal usage relied on to maintain orderliness of life.

Including—

Most of the *North American Indians*, such as Eskimo, Koniagas, Aleuts, Tinnehs, Nootkas, Chinooks, Dacotas, Mandans, Comanches, Chippeways, Haidahs, Shoshones, Californian tribes.

South American Natives — Patagonians, Abipones, Uaupes, Araucanians, Mundurucus, Arawaks, and other coastal or river tribes of Guiana and Brazil.

African Races—Damaras.

Asiatic Races—Nicobar Islanders, Kamtschadales, Samoyedes.

Aboriginals of India — Todas, Kurumbas, Nagas, Dhimals, Kukis, Santals, Billahs, Karens, Mishmis, Juangs.

Barbarians.

Obtain the larger part of their food by forethought in directing productive forces of nature; hence agriculture and breeding of animals are notable features, but each family secures its own necessaries, there being little division of occupation; yet food being more abundant and more evenly divided through the year, arts and sciences become incipient.

Lower Barbarians.—Dwellings generally fixed, forming villages; clothing regularly worn, except in hot climates; nudity of women rare; earthenware manufactured; good canoes built; implements of stone, wood, or bone; small cultivation plots round dwellings; trade incipient; ranks determinate but founded on individual powers in war; government by chiefs with traditionary laws; living in tribes of 1000 to 5000, but capable of forming larger confederacies.

Including — In America — Iroquois, Thlinkeets, Guatemalans, Nicaraguans, Mosquitos.

In Australasia—Maoris of New Zealand, Biaras of New Britain, Tombaras of New Ireland, Obaos of New Caledonia, natives of New Hebrides, natives of Solomon Islands, natives of New Guinea.

In Africa—Kaffirs, Bechuanas, Basutos, Wakamba Negroes.

In Asia—Dyaks of Borneo, etc., Jakums of Malay Penin., Battaks of Sumatra, Tunguz, Yakuts, Kurghiz, Ostiaks.

Indian Aborigines — Hos, Mundas, Oraons, Paharias, Gonds, Khonds, Bheels.

Middle Barbarians.—Good permanent dwellings, generally of wood or thatch; formed into towns of considerable size; always able to make clothing of moderate comeliness, but nudity not considered indecent; pottery, weaving, metal working carried on to some extent; commerce in its early stage; money used; regular markets

held; consolidated into states running up to 100,000 persons under petty kings; traditionary codes of laws administered; ranks well defined, arising partly from individual, partly from family prowess in war.

Including—In Africa. Negro Races—Dahomeys, Ashantees, Fantees, Foolahs, Shillooks, Baris, Latookas, Wanyamo, Waganda, Wanyoro, Wanyamwezi, Bongos, Niam-niams, Dinkas, Yorubas, Monbuttus, Balondas, Ovampos, Foorians.

In Polynesia—Fijians, Tongans, Samoans, Marquesas Islanders.

In Europe—Lapps of two centuries ago.

In Asia—Kalmucks.

Historically on the same level were—Greeks of Homeric ages; Romans anterior to Numa; German races of Cæsar's time, etc.

Higher Barbarians.—Able to build with stone; clothing necessary in ordinary life; weaving a constant occupation of women; iron implements generally made; metal working greatly advanced; commerce defined; money coined; small ships made, but propelled with oars; law rudely administered in recognised courts; people welded into masses up to 500,000 under rule of a sovereign; writing in incipient stage; ranks hereditary; division of occupations advancing.

Including — In Africa — Abyssinians, Zanzibar races, Somali, Malagasies.

In Asia—Malays of Sumatra, Java, Celebes, Borneo, Malay Penin., Sooloo Archipelago, etc.; Nomad Tatars, Nomad Arabs, Baluchs, etc.

In Polynesia—Tahitians, Hawaiians.

In historic times there were upon the same level—Greeks of time of Solon; Romans of early Republic; Anglo-Saxons of the Heptarchy; Mexicans at time of Spanish Conquest; Peruvians at time of Spanish Conquest; Jews under the Judges.

Civilised.

Food and other needs obtained with increased facility by the co-operation that arises from intricate sub-division of occupations. This leads on to great efficiency through specialisation, and in consequence the social organism becomes extremely varied in function but consolidated by interdependence. Easily attained material comfort, together with great specialisation, offers scope to steady growth of arts and sciences.

Lower Civilised.—Cities formed and surrounded by stone walls; important buildings elaborately designed in stone; the plough used;

war tends to become the business of a class; writing established; laws rudely written; formal courts of justice established; literature begins.

Including—In Africa—Algerines, Tunisians, Moors, Kabyles, Touaregs, etc.

In Asia — Turcomans, Thibetans, Bhutans, Nepalese, Laos, Cochinese, Anamese, Cambodians, Coreans, Manchoorians, settled Arabs.

In historic times up to this level were—Jews of time of Solomon; Assyrians, Egyptians, Phœnicians, Babylonians, Carthaginians; Greeks after Marathon; Romans in time of Hannibal; English under Norman kings.

2. **Middle Civilised.**—Temples and rich men's houses handsomely built in stone or brick; windows come into use; trades greatly multiply; ships propelled with sails; writing grows common, and MS. books are spread abroad; the literary education of the young attended to; war becomes an entirely distinct profession; laws are framed into statutes and the class of lawyers arises.

Including—In Asia—Persians, Siamese, Burmese, Afghans.

In Europe—Finns, Magyars of last century.

Historically on this level were—Greeks of Pericles' time; Romans of later Republic; Jews of the Macedonian Conquest; England under Plantagenets; France under early Capets.

? **Higher Civilised.**—Stone dwellings common; roads paved; canals, watermills, windmills, etc.; navigation becomes scientific; chimneys used; war no longer the occupation of people in general; writing a common acquirement; MS. books largely used; literature in high repute; strong central government extending over tens of millions; fixed codes of law reduced to writing and officially published; courts elaborate; government officers numerous and carefully graded.

Including—

Chinese, Japanese, Hindoos, Turks, South American Republics, etc.

Historical—Romans under the Empire; Italians, French, English, Germans of the fifteenth century.

CULTURED.

Lower Cultured.—Man's food and other wants secured in the easiest possible manner, by substituting natural forces for his own bodily labour; this, with increasing efficiency of organisation and co-operation, leaves him free to a large extent to cultivate his mental

and æsthetic faculties; printing widely employed; education becomes a prime duty; war steadily loses its pre-eminence; rank and reputation depend less on prowess, and more on mental capacity; laws made by representatives of the people; national efforts begin to be made for promotion and general diffusion of art and science.

Including—

The leading European nations and offshoots such as the people of the United States.

Middle Cultured.—All people well fed and well housed; war universally condemned, though of occasional occurrence; small armies and navies of all nations co-operate as a world-police; commerce and manufactures developing along sympathetic lines; liberal education general; crime and punishment rare.

This standard is due perhaps in another four or five centuries.

Higher Cultured.—Too risky a subject for prophecy, being yet distant perhaps 1000, perhaps 2000 years.

CHAPTER VI.

PARENTAL CARE IN MANKIND.

Diminishing Numbers of Offspring.

Man is in no way exempt from the law that with increasing intelligence there must come a diminution of offspring and an increase in the period of parental care. The change is still in progress among the most civilised of nations, and it not only offers to the individual increasing opportunities of improvement, but forms a deeply operative factor in that complicated tangle of causes which urge onward the course of progress. The man and wife with a family of three or four children, whom they successfully rear, educating them suitably and setting them forth well equipped to face the competition of life, are much more likely in the fourth or fifth generations to be represented by descendants than are a couple who have produced a dozen children, some to die after vainly taxing the strength of their mother in their birth and nursing; others to pass away after a few years, having in the meantime crippled the family resources, and deepened for all the pinch of hungry poverty.

In a community of the soundest hygienic conditions not more than twelve should die in the year out of every 1000. If each married couple had eight children on an average, the birth rate would be about sixty children every year to each 1000 of the population, and the annual increase would thus be forty-eight in every 1000, a rate which in a century would multiply the population a hundred-fold. No land could possibly increase its food production at that rate. England, for instance, with its 12,000,000 of a century ago would have to find sustenance for more than 1,000,000,000, where

now there is only enough for 40,000,000. Hence along all the line there would have to be a constant process of weeding out, and every generation would see three-fourths of its number die before maturity. But if three had to go, and only one to stay, there is every reason to believe that as a rule survivors would chiefly be found among the well-fed and carefully trained children of a family under the average number, while those that dropped out would in the aggregate be chiefly sprung from the families, less well cared for, that were considerably over the average. But of course we must understand that these are general tendencies, true of masses though not necessarily true of individuals; for one father may more successfully rear a dozen children than another a single child. On the whole, however, the children of the smaller families have the better chance; and if, of the population potential at the end of a century, only four out of 100 are to be actually there, the unseen but merciless process of weeding will, in so stern a competition, give a mighty influence even to so slight a cause as the superior chance arising from being born in a small family. Thus, as it will be shown at the end of this chapter, the cautious people who marry late, and yet prolong their tender care of their children, provide more than their share of each succeeding generation; and if these characteristics of prudence and parental love be in any way hereditary there must arise a tendency on the one hand to lessened families, and on the other to a lengthened period of education under the parental roof.

That the population of England does not multiply itself 100 times in a century is due to a heavy death rate which carries off a third of the children before the age of five, and a sixth of the remainder before the age of twenty. This is a sad safety-valve, and one which under the influence of sanitary improvement is steadily growing less and less operative. Yet some sort of safety-valve there must be, and it is being found more and more in a steady increase of the age at which people marry, with other prudential checks such as reduce the number of children on an average to a small trifle over four to each marriage.

But all this is the effect of intelligent self-restraint, and it appears in man only as the slow result of mental progress.

Savage man has his own dim ideas on the subject, and, as we shall see, he is not without his grim measures of prevention, but self-restraint is no part of his nature. In a cultured people of modern times, a tenth of the adult people live and die unmarried, a state of things inconceivable to the lower races, with whom every girl is appropriated, and every man takes as many wives as he can get.

In the humblest grade of all, among those whom we have classed as lower savages, there are no checks save those alone which are found in the lower animals. By reason of their position above the apes, they are of slower rate in propagating than any of the inferior animals, except the elephant alone, whose huge size, however, demands a sort of comparison which would still leave the savage the superior. A negrito or Bushman girl is not of age to be a mother until her tenth year, which is late compared with the lower animals; she has to go with child for nine months, a long period, and suckle her infant a couple of years. Nature therefore limits her increase in a way which is only the extension of checks already observed along the ascending scale.

In these races, remnants of a once widely spread dawn of humanity, there is no suggestion of a marriage ceremony, though the males and females unite in tolerably stable and monogamous union. The girls are ready to mate while still of tender years, and the average of all these lower savages shows that the men appropriate them at the age of eleven years, the negritos of the Philippines being high at twelve, and the Andaman Islanders highest of all at thirteen. As a rule the girl in these primitive races is a mother at the age of twelve, and the children recur after that time as often as nature will permit. Never beautiful, she is old and hideous at twenty-five, though she may continue to bear children yet a while longer; to bear children, but not to increase her family, for they die off too steadily to allow her ever to have much in the way of a circle round her. Yet both father and mother are good to their offspring. Mouat says that the Andamaners treat their children exceedingly well (*Roy. Geog. Soc.*, 1862, p. 123), and the missionary Casalis bears emphatic testimony to the tender affection and mutual devotion of mother and infant

among the Bushmen (*My Life in Basuto Land*, p. 158), while Sir C. B. Flower says in general that in the negrito races parental affection is strong. (*Anthrop. Inst.*, xviii., p. 81.) But its duration, though great in comparison with that of animals, is the shortest found in mankind. Lichtenstein tells us that among the Bushmen, boys take their regular share of the tasks of the tribe at the age of seven (*South Africa in* 1803, i., 260), and are thenceforward no doubt tolerably independent; girls married at eleven must pass away from the parental care, but, probably, before that age, both boys and girls are displaced by newer babies from much share in their parents' attention.

These inferior races are so little known that only vague and general statements can be made as to their habits. If, for instance, we wished to form an estimate of the number of children born to each woman, the design would be hopeless. A missionary or traveller may count the surviving children and record the average as three or four, but for the number born he would have to trust to the women themselves. These people, however, are uniformly unable to count more than four, most of them have no word for any number above three. They could not tell, therefore, even if they knew; but it is hopelessly beyond their powers of remembrance to tell of births and deaths that happened twenty years ago. If we average each woman as having in all ten children, it is on *a priori* grounds, and not as a matter of actual record.

The Fuegians and the Ainus or hairy aborigines of Japan are among the rudest of savages, yet their affection for their children is strong and tender. (Snow, *Ethnol. Soc.*, i., 264; Batchelor, *The Ainu of Japan;* Savage Landor, *The Hairy Ainu*, p. 296.) True they are subject to violent gusts of passion, such as that which Darwin describes, when a father, whose little boy had dropped some shell-fish, seized him by the leg and dashed his brains out upon the rock; but, in general, they spoil the young when infants by over-indulgence; their tenderness, however, declining in marked degrees as the years of babyhood pass away. Three-fourths of the children born seem to die in infancy.

Rise of Infanticide.

As reason begins to mark its ascendancy in the higher ranks of savage man, it tends to modify the ordinary operations of natural selection, and the first indications of its activity are of an unlovely kind. Abortion, infanticide, and still uglier methods, not here to be described, are adopted to check the growth of population. Such things never cross the mind of the lowest savage, for he has not the intelligence to devise the means for securing a distant end. The strong instinct of parental care is with him, as with the lower animals, a primal impulse never interfered with. But whenever men begin to reason about things, this question of redundant births arrests in a vague way their attention. If nature had been left to her own slow course, the tribes that wasted their strength in producing and half-rearing ten children to each woman would have disappeared in the competition with others who as a chance variety had the advantageous property of not producing more than half a dozen to each. But in the age-long process, what a dreary procession of starvation and sorrow would this imply! The savage, moved by the first glimmer of reasoning selfishness, takes the matter to some extent into his own control. Yet he no way restrains his passions. When the sexual instinct and the parental instinct are perceived to be at variance, it is the latter which has to give way. Accordingly the middle-grade savage makes use of the girls of his tribe to gratify his desire while they are still at a very tender age. Mr. J. M. Davis and other writers of repute declare, as the result of long acquaintance with Australian savages, that the girls were made use of for promiscuous intercourse when they were only nine or ten years old. (Brough Smythe's *Aborigines of Victoria*, p. 319.) Brough Smythe himself asserts that the Australian women commenced to have children when still under twelve years of age, and that in their early life they were very prolific, a total of ten to twelve children being the rule among women who lived to full maturity. I have obtained for twenty different tribes of these middle savages the ages at which the girls are appropriated by men, and find the average to be 11·53 years.

Take then the case of the average Australian girl of sixteen with her third baby in her arms, the second only two years old and the first but four. There is no patent infant food to be had; two of these children have to be suckled and carried on long marches; as for the eldest, it is impossible that his little four-year-old feet can accomplish the long tramps in search of food and water which the necessities of the tribe demand. His father will have to carry him. Now if the family is increased ere long by another infant, or perhaps a pair of twins, the resources of food and transport are strained to their utmost. Many a long and grumbling march, while the father bears one child in his arms and drags another worn-out whimperer behind him under a blazing heaven, will weary the never extraordinary patience of the savage. His parental cares are so different from those of the animal, and yet he himself is not sufficiently lifted above the animal to be equal to the burden laid upon him.

Moreover he becomes aware that, in spite of his hardships, two-thirds of the children pine and die. He has then enough of cunning wit to see his way out of many a difficulty, and he proceeds to limit the number of children. Very rarely does he operate upon himself, much more frequently upon the women, but most generally he works by means of infanticide. In most parts of Australia there were tribes in which the men so mutilated themselves that while still able to gratify their desires, they were incapable of begetting children. (*Native Tribes of South Australia*, p. xiv.; *cf.* Dawson, Rusden, etc.) Lieutenant-General Fytche describes an analogous custom among the Nagas of Burmah. (*Burmah, Past and Present*, i., 350.) Abortion is a practice rather beyond the skill of the middle savage, but it becomes prevalent among the higher savages and very prevalent among barbarians. But at least some of the middle savage races were acquainted with rude and violent means of producing it. (Bonwick's *Daily Life of the Tasmanians*, p. 76.)

It is very evident then that people on this level of development would naturally have recourse to infanticide. It is a practice unknown in the lower savages, though there is the somewhat doubtful exception of the Bushmen; nor does it

occur in Fuegian or Ainu tribes. But above that level it is universal, increasing in prevalence with the increasing dominance of reason, reaching a maximum among the lower and middle barbarians and thereafter slowly dying out, but not really extinguished as a lawful practice much before the level of the higher civilised races.

And yet it is not to be too readily assumed that there is here a failure of the parental instinct. There is every indication that both father and mother in general put a severe strain upon themselves to do what the usages of the tribe consider right. If killed at all, the child is almost invariably destroyed immediately after its birth; for, as the testimony of scores of observers amply certifies, if the babe is allowed to live for only a few weeks, it ingratiates itself into the hearts of the community to such an extent that its life is safe. Among the Australians, women are brought up to regard it as a wicked thing to burden their tribe with more than three or four children, and a mark of selfishness to gratify inordinately the maternal affections. Undoubtedly the parents understand that they are likewise consulting their own ease; as men and women looking before and after, they gauge the pains of the future by the sufferings of the past; but while they save themselves trouble they have undoubtedly a perception that it is less cruel to destroy the still unconscious life, when a single pang is the only suffering, than to permit an excess of children to cause for all of them the cravings of unsatisfied needs, while the requisite number of deaths will as surely come one way as the other, but in longer, drearier, more heart-breaking fashion if deferred. Hence we may heartily agree with E. B. Tylor, when, in his excellent little work on *Anthropology*, he tells us that "infanticide comes from hardness of life rather than from hardness of heart" (p. 427). For, as he says, "the parents will often go through fire and water to save the very child as to whom they were doubting a few weeks before whether it should live or die".

Brough Smythe tells us (p. 51) that "a third of the infants of Victorian aboriginals were killed at birth," yet he says these people were "affectionate and generally judicious in the management of children, who were never beaten or ill-used".

And in the same work (*Aborigines of Victoria*, ii., 290), Mr. Le Souëf states that among these tribes "infanticide is not practised so much from want of affection for their offspring. On the contrary, those they rear they are very fond of. Infanticide is a matter of convenience. If a woman has a second baby before the previous one can take care of itself, it stands but a poor chance of its life." Mr. Taplin (*Native Tribes of S. Australia*, p. 15), after describing the great prevalence of infanticide, continues: "Only let it be determined that an infant's life shall be saved, and there are no bounds to the fondness and indulgence with which it is treated; its little winning ways are noticed with delight, and it is the object of the tenderest care".

E. M. Curr, the leading authority as to the natives of Victoria, states of the tribe with which he was intimate for nearly twenty years that "nearly half of the children born fell victims to infanticide, a practice resulting principally from the difficulty, if not the impossibility, of transporting several children of tender age from place to place on their frequent marches". Yet further on, he says, "parents were much attached to their children, and rarely punished or corrected them. They were habitually indulged in every whim," and "their parents supplied them with food till they were ten or eleven years of age". (*Recollections of Squatting in Victoria*, p. 252.) Exactly similar is the testimony of Woods, Eyre, Schürmann, and Lang, as to what Angas calls the "almost idolatrous affection which the parents show their children," even though infanticide is common.

Kolben (i., 142) says that the Hottentots frequently buried their new-born female infants, and Sparrman (p. 358), that they always buried a young infant if its mother was dead; yet both speak of parental affection as being very strong among this people. Wallace (*Amazon*, p. 361) says of the savage Brazilian tribes that they invariably kill their first-born babies, yet when a child is suffered to live they have an affection for it so intense that nothing will induce them to part from it. Indeed those who have tried to buy a child from these nations have always failed to do so. The Rev. Mr. Brett says of the tribes of Guiana, among whom, from other

sources, we know that infanticide prevails, "they are very fond of their children, and so indulgent that they never chastise them". (*Indian Tribes of Guiana*, p. 98.)

Infanticide must therefore in no degree be ascribed to a failure of parental instinct, but rather to the crude workings of that instinct in races whose lives are hard, and whose natures are not yet under the habitual control of any but coarser sympathies. While nature would impose on a man who finds it difficult to win from the forest food enough even for himself, the necessity of finding food for half a dozen, he takes his own way of escaping from the impossible task, not altogether untouched by the cruelty of the immediate means, but compensated in his own dim way by the thought of suffering avoided. In short, while nature would introduce four children only to starve and extinguish three of them, the savage kills two and makes an effort to rear the other two. While we condemn his means, we may fairly enough see many extenuating circumstances if we only endeavour to look at things from his point of view.

Among the higher grade of savages, an increase of intelligence of a somewhat cunning sort causes abortion to become more prevalent and diminishes to almost the same extent the reliance placed on infanticide. The girls are not so greedily appropriated in their tenderest years, only one out of the thirty-four races enumerated on page 105 forcing the girls into sexual unions at so early an age as ten years. Most of them leave the girls in maiden state to the age of twelve or thirteen, the average of seventeen races being the merest trifle under thirteen years. This gives the women a better chance of health and comeliness, and reduces a little the temptation to the destruction of the first-born, who, in the more savage races, spring from their girl-mothers as miserable little creatures, almost certain to die in any case.

Much more than a century ago, Dr. Robertson, the famous historian of America, stated as a general rule that the Indian tribes of that continent were well acquainted with the means of procuring abortion (vol. iv., p. 73), and Darwin quotes the fact as one well known. Of late years, while increasing knowledge of details leads us to exempt a few tribes from the

charge, we are absolutely certain that the practice was indigenous among the great majority. Lewis and Clarke, who in 1804 and several succeeding years lived among tribes of the Pacific slope that had until then seen the face of no white man, assert as a matter never in any way concealed, that a certain plant was freely used by the women with the approbation of the men in order to reduce the number of births. (*Travels to the Pacific*, p. 49.) There is no need to specify the various tribes addicted to the custom, for Bancroft in his *Native Races of America* adds to almost every description of a tribe the words "abortion and infanticide are common". Schoolcraft in his huge work on the *Indian Tribes of North America* (i., 252) includes a paper by Dr. Williamson, who was for several years a physician among the Dacotas. In this we are assured that these people were well acquainted with the properties of some of the plants around them, which prevented the women from being encumbered with more children, when they already had as many as they could carry with them. Similar information from respectable sources can be had in the case of Chinooks, the Nootkas, the Haidahs of the Queen Charlotte Islands, the Californian tribes, and others.

But the use of these plants was never certain, and very often it was fatal to the women themselves. Hence infanticide still prevailed, though without indicating any real failure of the parental instinct. For Robertson (*Hist. of America*, iv., 108), while he quotes abundantly from the old Spanish, French, and English writers to show how universal throughout both North and South America was the practice of destroying new-born infants, is also impartial enough to quote their statements, which show that they nevertheless felt the full force of the parental instinct, and that "as long as their progeny continue feeble and helpless no people can exceed them in tenderness and care". Lewis and Clarke, while describing their habits of infanticide, assert that "nothing can exceed the tenderness shown by them to their offspring". (*Travels to the Pacific in* 1804, p. 123.) When Buchanan (*N. A. Indians*, p. 66) wished in 1824 to get an Indian child to adopt and rear, no bribe he could offer would tempt a mother

to part with one. If a babe lived but a week or two so as to find a place in the family affections, it was safe. Schoolcraft tells us (v., 272) that "to destroy a new-born infant is not uncommon in families that are grown too numerous, but the right of destroying a child lasted only till it was a month old. After that time the feeling of the tribe was against its death."

Bancroft states that the natives of Central America were, and still to some extent are, addicted to infanticide, yet the children that live are well cared for; "they almost always remain with their parents till married, and a fond affection for their early homes prevails among them". The same author (*Native Races*, i., 81) tells us that the Eskimo abandon some of their babies, especially the girls, to perish in the snow, yet he states that to those they rear the women are kind and patient mothers, and that the possession of children is much esteemed so long as they are not too numerous. Hartwig in his *Polar World* praises highly the kindness of the Eskimo women to their children, "whose docility and gentleness are such as to occasion their parents little trouble".

Precisely the same contrast exists in all the more advanced savage races of South America. Guinnard, speaking of the Patagonian, or rather perhaps the Araucanian tribes, with whom he was a slave for three years, states (p. 143) that the existence of the new-born child is always at the judgment of the father and mother; but "if the little creature is considered worthy to live, it becomes from that instant the object of the whole love of the parents, who will submit themselves to the greatest privation to satisfy its slightest wants or exactions". Captain Musters states of the Patagonians, that the children are indulged in every way, ride the best horses and are not corrected for any misbehaviour. (*At Home with the Patagonians*, p. 197.)

Thus of savages as a whole it may be said that they represent on the one hand the culmination of the purely animal side of parental love, but that on the other, there is seen the intrusion of the effects of reason, sometimes for good, sometimes for evil. Their affection for their children is an instinct of race preservation analogous to that of the lower animals, and gratifying itself without restraint. The savage

knows little of that higher affection subsequently developed which has a worthier purpose than merely to disport itself in the mirth of childhood, and at all hazards to avoid the annoyance of seeing its tears. During those very early years when the infant is his idol, he tends it with a foolish indulgence, gratifies himself by humouring its whims and compelling as far as possible all others to do the same. We know among ourselves what a spoiled child is, and how he grows up where parents are restrained by no sense of the responsibilities of the future, no appreciation of the rights of other people. The animal instinct which binds the parents to their offspring imperiously satisfies itself; it spares them no expense, no trouble to win a single smile from a sulky tyrant. Such in the main is the savage love of offspring, and many defects in savage life may be traced to the want of parental restraint in the plastic days of childhood.

The Disappearance of the Lower Races.

The steady decay of savage races when in contact with superior civilisation is too often set down as an instance of a want of humanity even in the most cultured nations. Musket and pistol are supposed to execute the fatal work. But this is in large measure a misconception; the decay of the savage is due almost entirely to the failure of reproduction. It is true that the Spanish conquerors of America were somewhat ruthless; it is true that all colonising nations before this century were high-handed, often callous, and sometimes cruel. But we may most cordially agree with Oscar Peschel (*Races of Man*, p. 150, English trans.), when he says that "the idea of sanguinary suppression of aboriginals must not be entertained" as the cause of their decay. The reasons he himself gives are too fantastic to be taken seriously, but the fact itself is certain. The colony of Victoria was not occupied at all by white men till 1835; and the early founders had among their articles of association most humane rules in regard to the blacks, rules which were strictly carried out. With the exception of 147 in the first two years of its existence, no

convicts ever darkened the shores of the colony, and immediately after immigration began, the authorities appointed five protectors of aborigines who lived among the blacks and reported once a year as to their condition, and who were especially commissioned to report on any outrage committed by white men. These reports may still be read and are conclusive proof of the absence of violence. Seven or eight years later when a Wesleyan clergyman resident in Tasmania told a romantic tale of the evil treatment of blacks in Victoria, an English Parliamentary Commission took the case up, and in the House of Commons papers will be found the most satisfactory evidence that with one exception involving the death of two aboriginals, the white men had wrought no conscious evil to the natives. The conflicts which occurred caused, it is true, fewer deaths among the whites than among the blacks, but the numbers were on neither side considerable. Yet the aborigines of Victoria are practically a vanished race. If we ask why it should be so, we must in the first place remark that they never were numerous. Seven thousand were but a handful in a land now containing 1,250,000 and capable of maintaining 50,000,000. It took ten square miles to afford a miserable sustenance to every savage. Any increase in their numbers under their way of living was impossible. Their habits had become very exactly adapted to maintain their numbers and no more. The balance had grown to a very nice adjustment, and the existence of the race hung on a very precarious thread. Then came the white men to disturb that balance. Among savages the chastity of the women is never valued; as we shall subsequently see, the promiscuous intercourse of unmarried girls, or general promiscuity at certain seasons, always prevails; a man visiting a friendly tribe is generally provided with a female. In almost every case the father or husband will dispose of the girl's virtue for a small price. When white men came they found these habits prevailing. The overwhelming testimony proves it absurd to say that they demoralised the unsophisticated savages, but the average white man is no way raised above the sordid level which will readily embrace a sensual opportunity. In return for knives, tobacco, spirits or other inducements, the lower classes of the pioneers, men often

tainted with venereal diseases, had free intercourse with native women, and two things happened. On the one hand whatever half-caste children were born were almost invariably destroyed, on the other the large number of unmated white men, their comparatively extensive means of enticement, and the acquired craving of the blacks for drink and tobacco placed their women very much in the position of prostitutes. Their fertility fell off, and the race rapidly failed to reproduce itself.

Darwin is inclined to think that a general loss of fertility occurs when the habits of a race are too suddenly altered, and this he ascribes to unknown causes. (*Descent of Man*, chap. vii.) But to those who have studied the history of our colonies, the causes can scarcely be considered unknown. Carl Vogt, it is true, declares that the infertility of the Mamelukes in Egypt, of the Dutch in Java, and the English in India points to the effects of altered climate. But his facts, not in themselves beyond cavil, would only prove the effects of a change of climate, as in the case of Maori people brought to England, and failing to maintain their numbers by reason of shattered constitutions.

In the case, however, of aboriginals left in their own climate no such violently operative cause can be alleged. Their decay can be shown by ample testimony to be due to the fact that no ideal of chastity exists in any form within a savage race, and that the arrival of large bodies of unmarried white men converts the scanty native women into habitual prostitutes, who rapidly learn to minister to the wants of the tribe by using their persons to attract the superior wealth of the new-comers.

Bonwick and Calder, our two chief authorities on the Tasmanians, both agree that this cause accounts for the disappearance of that absolutely vanished race. Bonwick says that their decay was much more due to infrequency of births than to frequency of deaths, and that this sterility was due to the habits of the women. (*Last of the Tasmanians*, p. 386.) Calder estimates that a total of 500 far exceeds the number of blacks killed by the whites in Tasmania during the whole thirty years of their collisions. This would increase the death-rate of the population less than four in the 1000, which in a vigorous

race would be unimportant. During these same years, huge wars were devastating Europe and increasing the death-rate quite as much, in some nations even more, yet no European race has vanished in consequence. Calder gives as the reason "the infertility of the women, produced by licentious habits". (*Native Tribes of Tasmania*, p. 114.)

The North American Indians owe their decline in a large measure to the same cause. It is true that Catlin attributes their decline to whisky and smallpox. But whisky is very deadly also to white men, and no epidemics could have been more severe than the plagues which in bygone centuries swept across Europe. Catlin gives a sentimental description of the virtue of the Indian women (i., 120), but his own pages show how easy it was for the trappers and white traders to have as much commerce as they wished with the women if only they paid the usual price to the men, and in a subsequent chapter we shall see how unanimous are the leading authorities in denying that the Indians had any idea of chastity other than the exclusive control of the husband over his wife's person.

Schoolcraft's tables of statistics show that among Indian tribes numbering 35,000 souls, the birth-rate was over forty-two per 1000, a rate quite healthy enough, and probably capable of just maintaining the race when the casualties of war and want of medical knowledge are considered. But the table at the end of his first volume shows only 1·7 children living for each woman between the age of sixteen and sixty. In Europe, a population remains stationary if there are only three children to each marriage, so that we can easily understand how inevitable is the disappearance of the Indian. Such a race as the Mosquito Indians is rapidly approaching extinction "not from strong drink and imported diseases, but as the natural result of the profligacy of both sexes". (Bell, *Royal Geog. Soc.*, 1862, p. 261.) The same statements may be made of South American tribes. Boggiani says (*Nature*, liii., 547) that abortion and infanticide are exterminating the Paraguay tribes, the women rearing only one child each.

The Registrar-General of New Zealand states in several of his annual reports, that the decline in the number of Maoris is to be attributed to the "sterility of the females due to their

immorality before marriage". Thomson (*Story of New Zealand*, ii., 285) gives as the six causes of their decline—sterility, infanticide, inattention to children, breeding in and in, new habits, new diseases. Four of these six are connected with the failure to reproduce the race. Nor is this surprising when we learn (Thomson, i., 285) that for many long years the chiefs lived in affluence by letting out the women of the tribes for the use of the crews of whaler and trading ships. Pomare had ninety-six girls so employed, a most serious social condition, when we consider that these formed at least a third of the child-bearing women of his tribe. Figures given by Thomson (ii., 287) show that after the arrival of white men, a third of the Maori women became sterile.

Ellis (*Polynesian Researches*, i., 105) attributes the decline of the Tahitians to "libertinage and infanticide". The disappearance of the Hawaiians he attributes to "want of chastity among the women". It is undoubtedly true that these causes, along with wars and human sacrifices before the advent of the white men, were keeping the population in check so that it was slowly declining; but the appearance of numbers of dissolute sailors, with the means of purchasing gratification, greatly increased the rapidity of the decay. On the Nicobar Islands in 1886 the 621 women had only 722 children, little more than one each, a rate quite certain to lead to the extermination of the race. (E. H. Man, *Anthrop. Inst.*, xviii., p. 368.)

If these, being specimens of abundant testimony, are accepted as fairly conclusive, we may pass on from an unpleasant subject, which affects our inquiry only in so far as it shows the manner in which the survival of the fittest occurs. The low class of white men who are the instruments of this decay themselves die out. The "beach-comber," the trapper, the convict boundary-rider leave few progeny in spite of their strong sexual impulses. But we do not readily perceive among the profligate of our own great cities that they either fail to leave any progeny, or at least do not leave enough to ensure that the strain will reach a fourth generation. It is only in a distinct race that we observe in any noteworthy way the effects of intemperance and unchastity in dismissing the inferior specimens of mankind.

Yet all the same it is a process that goes on in the slums of our own great cities just as much as on the sunny shores of Pacific isles, and it calls our attention to the appearance of a new factor in the growth of parental care. The chaste mother is more likely to have children, more likely to value them, and to rear them tenderly than the unchaste. The man who knows a child to be of a certainty his own, whose attentions are not paid to so many women that out of half a hundred children he could not easily say which were truly his, must on the average make the better father. And thus the causes to be detailed in a subsequent chapter, which make the ideal of chastity rise gradually out of moral chaos so as to become an immense factor in human progress, have their influence strongly marked also on the subject now under discussion, the growth of parental care. We shall frequently have occasion to note how little our progress depends on the improvement of the individual, and how much on the elimination of inferior individuals. So it is in the case we now discuss. Parental care among mankind is always on the average tending upwards. For all the races or portions of races which make themselves sterile through immoral habits, which practise infanticide and abortion, and whose parental love is shown only in the purely animal way of fondling their children and indulging their wishes, but without any of the higher promptings of chastity and self-restraint, are doomed to disappear and leave room for others.

Lower Barbarian Parents.

Savages are everywhere throughout the world passing on to extinction. Soon the gap that divides the animal from the man will be increased by the loss of these still existent links. And yet other links soon afterwards must go, for those of the lower barbarian standard are nowhere able to maintain themselves. Among these races the growing power of intelligence is made subservient to the ease and comfort of the individual, not to the good of the race. Abortion and infanticide become more common, while licentiousness deepens and grows more

systematic. But at the level of the middle barbarians the nadir at last is reached. Abortion and infanticide thenceforward greatly decline, till they die out in the grades of higher civilisation; chastity meantime begins to be regarded as an ideal among women, though not, for yet a long time, among men.

Nevertheless, along all the line, progress in parental care is seen, even though at first that progress is rather of an animal than of a moral nature. We regard a man as on the barbarian level when he ceases to be a wanderer, dependent upon untamed nature. If he builds himself a fixed, even though humble dwelling, and breaks up a little soil to provide himself with food; or, if the nature of his land fit it rather for pasturage than for tillage, and in consequence he be still a rover, when he asserts his higher intelligence by taming and utilising herds of cattle, of sheep, of goats, of camels, of reindeer, his life is less afflicted with recurring famines, his dwelling is improved in conveniences and comforts. In consequence there is an increase of home-life and all its warm associations, with multiplied parental affection.

Here, at this level, the educational care of the young begins to assert itself as a leading feature in parental regard, a feature destined to play the most notable part of all in the humanising influence of progress. A French or English child allowed to grow up absolutely devoid of training or education would be to all intents and purposes a savage, not much higher than an Australian black, and possibly lower than a North American Indian. The subsequent story of parental care is more and more bound up in that affectionate forethought which is at the basis of systematic education.

Not that this principle here comes into play absolutely for the first time. We know that many birds teach their young to fly, to dive, to catch their prey. Many of the carnivora train their young to some extent. Cats are often seen to do so with kittens, and older dogs take an intelligent interest in the training of puppies. Monkeys, too, cuff and scold the mischievous urchins of the troop till they are taught good manners. But with the dawning intelligence of man the practice of education tends to become a leading feature of

social life. It is not so to any very marked extent in the lower savages, though even there, seeing that the making of the bow and arrow, the choice of the proper wood for a spear, the art of obtaining fire must be handed down from father to son, there is of necessity something in the way of a rude education given to the young. But with the middle savage, the process assumes a more conscious nature even though yet only embryonic. The Australian takes some little interest in bringing up his children to the ways of the tribe; shows them how to play its games, to make its favourite implements, and hunt in the style approved in tradition. A similar training, though more elaborate, is common enough among the North American Indians, and practically among all the races on the upper savage level.

But with the settled life which marks the transition to the barbarian stage there come increased facilities for education. That which is given by an Iroquois, a Maori, a Papuan, a Kaffir, a Yakut, or by most of the Hindoo aboriginals exhibits the beginning of a systematic attempt to form the character. The child is no longer left to pick up merely what he can on his own account; nor is it enough that the parent should simply, when the whim arises, amuse himself in a passing way by showing what he happens to know. The Maori, for instance, though with little or no division of employment, had many arts and trades in which the young were systematically instructed. The making of the canoe, the building of the house, the fortification of a pah, the breaking up of the soil and the planting of taro, the cleaning of fibres, the spinning of them and the weaving of mats—all these and other or equivalent things are taught throughout the whole of the lower barbarian level; and, as we may be sure, advancing civilisation with its greater complexity of arts and products demanded an ever-increasing care of education. But this training is at first always of an almost exclusively domestic character. That form of parental care which establishes the school and employs the schoolmaster is a feature which dawns for the first time in the lower civilisation; at least, I have met with no authentic traces of it at an earlier level.

The settled life which renders existence so much easier to

the barbarian, and gives so much more facility for the training of the young, ought, as one would think, to diminish greatly the temptation to abortion and infanticide. And so eventually it does, but not immediately. It is only when we reach the higher standard of the barbarian group that these things are disapproved and distinctly decline, though many races in a rather lower stage are honourably distinguished in this respect. Of the lower barbarian races there is not one which condemns these practices, though Kaffirs and some negro races perpetrate them but little. So, also the Dyaks, and Malay races on the same level, are uniformly reported to be only slightly addicted to them. In all the others, both of these practices are very common, not more common perhaps on the average than among savages, but the fact is more striking among a settled population, and it then is more easily discovered.

The Rev. Mr. Taylor says that infanticide was extremely common among the Maoris. He knew of one woman who had destroyed seven of her infants because, as she said, she would otherwise have been unable to follow the war-march. Yet he tells us that the Maoris show extreme affection for their children, who indeed were spoiled by over-indulgence. (*New Zealand and its Inhabitants*, p. 338.) Dr. Steele, speaking of the natives of the New Hebrides, states that they have an extraordinary disposition to bury their new-born infants alive, very few women being allowed to keep more than three at the utmost; yet he says that "we often saw the men nursing little children and carrying them about in their arms most tenderly". (*New Hebrides*, p. 219.) Codrington says that everywhere throughout Melanesia infanticide greatly prevails, yet "generally man and wife get on well together and are joined by the great love they bear their children". (*Melanesians*, p. 229.) H. Brooke Low tells us that among the Dyaks, offspring of regular unions are not often killed; elsewhere we learn, however, that illegitimate infants are generally destroyed. Yet he declares that these people are so inordinately fond of children as to wholly spoil them, and Karl Bock (p. 210) describes how the men of the village are to be seen taking it in turn to fondly nurse the infants. Among the Tunguz and

other Siberian barbarians "parental affection is a passionate frenzy". Yet the parents have the right, which they not unfrequently exercise, of deciding whether the new-born babe is to be destroyed. (Niemojowski, *Siberian Pictures*, i., p. 29.)

Middle Barbarian Parents.

A step in advance brings us in front of an anomaly, for while the great majority of the middle barbarians, though expressing no disapprobation of infanticide, practise it but little, there are a few races on the same level in which the habit is as inveterate as among any of the savages. Among the negro people who form by far the greater part of this grade, infanticide is rare, being confined to the case of twins, and sometimes to occasions when a mother has died leaving behind her a tender nursling. Lapps and Kalmucks were not addicted to the practice, and among the Polynesian races, though the Tongans and Samoans commonly practised abortion, they very rarely were guilty of infanticide. (Turner, *Samoa*, p. 79.) And yet the Fijians, who were on the same level of progress, were greatly addicted to both practices, although, as we learn from several authorities, fathers and mothers had a strong attachment to such children as they suffered to live.

On the level of the higher barbarians, it may be said in general that infanticide is a waning practice, little customary, though only feebly condemned by public opinion. And yet two of the races on the same level are still as much addicted to it as any. In Tahiti, as Ellis tells us (*Polynesian Researches*, i., 251), two-thirds of the children were destroyed, only about three being spared to each mother; yet if the baby was allowed to live a few days its life was safe. In Hawaii, however, the child was liable to be slain until a year old. Yet in the case of both these peoples, he speaks of the fond indulgence which they show to the children actually reared.

These two isolated regions probably show a persistent survival of old customs. For in all the other peoples of this grade, we know as a matter of certainty that infanticide was

once of the widest prevalence, but that the modern infrequency of the practice is the result of progress. For instance, in Madagascar, as we are told by the Rev. H. W. Little (*Madagascar*, p. 60), it formerly prevailed to a pitiful extent; but for centuries back the practice has been dying out. Ellis (*Hist. of Madagascar*, i., 161) says that it was still common enough among the lower orders when the missionaries first went there, but condemned among the better classes. The latter author says that "nothing can exceed the affection with which the infant is generally treated," while Little describes a pretty custom according to which the grown-up sons and daughters return at New Year time to present their mother with some small gift known as "the incense of the back," a grateful allusion to the time when they were carried on their mother's shoulders (p. 64).

The Arabs are not now addicted to infanticide, yet we know how very common was the practice at one time among them. At the beginning of our era, it was regarded as a virtuous and patriotic deed to bury a daughter at her birth, the natural instincts of the parent being a weakness to be sternly repressed in the interests of the tribe (Robertson Smith, *Kinship and Marriage in Early Arabia*, p. 282), for, as the learned author remarks, these tribes during a considerable part of the year suffered severely from hunger. They were under the opposing influences of two stern necessities; on the one hand the tribe had to keep itself large enough to meet its enemies in combat, yet on the other hand it was bound to be small enough not to exceed the subsistence offered by a limited area. In these circumstances, death fell generally on the daughters. The grave was dug within the tent by the mother's bedside, and when the babe was born, if seen to be a female, it was at once dropped into the gulf before it had properly drawn a breath. Yet strange enough such girls as were allowed to live were greatly prized, perhaps all the more so inasmuch as the struggle was great to rear them. Lady Blunt in her book on the *Bedouin Tribes of the Euphrates* (ii., 214) says that "no people are so kind to their children, who are never scolded or ill-treated," and this parental love must have been of an olden date, to judge from Robertson Smith's legends of

the race, which show how many quarrels arose about the possession of children.

Among all barbarian peoples abortion is common, but declining towards the higher levels. Papuans use the croton plant for this dangerous purpose (Rosenberg, *Der Malayische Archipel.*), and Codrington declares that the custom is common throughout Melanesia, either the juices of certain plants or else mechanical violence being used. (*Melanesia*, p. 229.) The Rev. B. Danks says that in New Caledonia newly-married women are rarely allowed to have children for some years after marriage, mechanical means being chiefly used to procure abortion. (*Anthrop. Inst.*, xviii., p. 291.) The Rev. Lorimer Fison tells me that the same practice was common in Fiji. In New Caledonia, the New Hebrides, and so on, abortion is known from the statements of missionaries to have been freely practised. Among the Tatar races of Siberia it is a well-known custom which public opinion in no way condemns. (Niemojowski, *Siberian Pictures*, i., 161.) In Tahiti it was practised without concealment, although by the manner in which Ellis refers to it, we may suppose that a sense of some slight shame was growing up in reference to it at the time when missionaries first took up their residence there. (*Polynesian Researches*, ii., 72.)

Decline of Infanticide.

Indeed it is a matter of tolerable certainty that every race in its progress to civilisation passes through the stage of infanticide and uncondemned abortion. The Aztecs used to effect the latter purpose by means of decoctions of herbs, while it was a general custom to kill one of a pair of twins. (Bancroft, *Native Races*, ii., 269.) Buckle in his *Commonplace Book* (ii., 340) agrees with Warburton in the belief that the Egyptians were once greatly addicted to infanticide; the slaying of all the Jewish male children (Exod. i. 16) shows that no sort of guilt was attached to the killing of infants, and though Wilkinson tells us that the laws forbade the practice, yet these very laws themselves hint at its former prevalence

(chap. viii.). For while the punishment for killing the meanest slave was death, all that was decreed against the slayer of his own child was that he should carry the corpse for three days fastened round his neck, an enactment which shows that the current of public feeling, though it ran against the practice of infanticide, was by no means strong.

The words of the Koran are graphic: "when any of the Arabs is told the news of the birth of a female, his face becometh black, and he is deeply afflicted. He hideth himself from the people, considering within himself whether he shall keep it with disgrace, or whether he shall bury it in the dust" (chap. xvi.). But the prophet speaks from a higher plane and says (chap. xvii.): "Kill not your children because you fear to be brought to want; we will provide for them and you. Verily the killing of them is a great sin." Accordingly as the Arab races passed from barbarism to Saracenic civilisation, infanticide steadily died out.

Among the ancient Persians, abortion was condemned at an early date, for we find it treated as a serious crime by Zarathusthra (Martin Haug, *Essays on the Parsis*, p. 242), and the laws of Manu (iv., 208; viii., 317) strongly condemn it, but less strongly the destruction of new-born children. The ancient Jews seem to have themselves practised infanticide, for as late as the time of Isaiah, they are reproached with the habit of "slaying the children in the valleys under the clefts of the rocks". In Chronicles xxviii. 3, and xxxiii. 6, the same statement is made. It is true that these cases may have partaken of the nature of human sacrifices rather than of ordinary infanticide, but the two generally prevail together, and we have express testimony that both of them existed at that time among all the surrounding nations, Phœnicians, Aramæans, Syrians, and Babylonians, as well as among their kindred the Carthaginians. Moreover the regulations for the sale of daughters in the Mosaic law (Exod. xxi. 7) render it almost certain that this was the period when infanticide began to be condemned, for we shall subsequently have occasion to notice that the change from the slaying of superabundant children to the selling of them is a well-marked stage in moral growth. Thus one of the first glimpses we have of the Jews is that of

a nation which practised infanticide, yet whose leading men condemned it.

They seem to have been among the earliest nations to abandon the practice, and to this fact may be ascribed in some measure their persistence, their early predominance, and their tendency to spread out over the world. They have had through long centuries a strong parental instinct, unequalled in any race save the negro. The passionate desire for children shown in the words of Abram (Gen. xvi. 2); in those of Rachel (Gen. xxx. 1); of David (Psalms cxiii. 9); of Hannah (1 Sam. i. 10), and other often-repeated instances suggest a deeply rooted instinct whose influence would at an early date arrest infanticide. Seeing that in brain-power they were well developed, the fact that they multiplied as the sands of the shore did not compel them to swarm and starve in their own land, but rather to hive off and prosper in others.

But we make our acquaintance with the Greeks at an earlier period of their development than with the Jews. The laws of Lycurgus at Sparta, and of Solon at Athens, expressly permit the practice of infanticide. It was a matter of every-day life throughout Greece, but girls were more often destroyed than boys. As Posidippus remarks—

> Any man however poor his fortune
> brings up his son,
> But a daughter is slain even by the wealthy.

Duruy, in his *History of Greece* (i., 559), says that the families were never large, and the exposure of infants, especially females, was very frequent. Abortion was a perfectly familiar usage. It is strange and somewhat humiliating to see how far on into the midst of a civilisation in some respects admirable, these ideals of a savage time perpetuated themselves. Plato's lofty soul sees no harm in either abortion or infanticide. In his republic, men over fifty-five and women over forty are not considered fit to be the parents of stout citizens. They are to be allowed whatever sexual intercourse they please, but either abortion or infanticide must prevent them from adding to the population. (*Republic*, v., 9.) Aristotle also in his *Politics* (vii., 16) says that it must "be a law that no imperfect or maimed child shall be brought up,

and to avoid an excess of population some children must be exposed, for a limit must be fixed to the population of the State. But if any parents have more than the prescribed number of children, abortion must be resorted to."

And yet Aristotle himself bears witness to the disastrous results of a public opinion of this description. He relates (*Politics*, ii., 9) that at Sparta people grew too lazy to rear their children, and when the race threatened to die out, those with three children were exempted from the night watch, while those with four were exempted from the payment of taxes. Their fate was therefore quite different from that of the Jews, and it is probable enough that little of the true Hellenic strain of blood was left at the beginning of the Christian era; for however imperceptible may be the wearing out of one strand and the gradual insertion of others into a populace, it is effectual enough in a few centuries to wholly eliminate a race. If the Greeks habitually destroyed a third of their daughters, while female slaves and foreign courtesans made up the deficiency, then at each generation the average population would be one-sixth part less Hellenic than it had been before. At the end of two centuries, the citizens of Athens under such conditions though nominally Athenian would have been only one-fourth Athenian, and three-fourths of extremely mixed but in the main inferior birth. Thus the popular idea that the particular race had in itself degenerated is untrue, the fact being that in four or five centuries the race had gone out as effectually as if a conqueror had subjected it to a universal massacre. In cases such as that of Lacedæmonia, wherein, to be a full-blooded Spartan, a man's father and mother had both to be Spartan, it was possible after a few centuries to see the result of the process, how the 8000 Spartan citizens of the time of Herodotus were reduced in the time of Aristotle to 1000 (*Politics*, ii., 9), and shortly after in the time of the third king Agis, to no more than 700. (Müller, *Dorians*, iii., 10.)

Thus infanticide, and still worse customs of the Greeks, brought their own retaliation; they suggest most clearly the true method in which moral progress comes about, that is by the elimination of races or of elements in a race whose natural

disposition is immoral and therefore in the long run harmful to society. The Greeks paid, by their subsequent extinction, for their prevalent infanticide and immorality. Each generation differed but little from the preceding, and had still much the same right to call itself Hellenic, more especially as it spoke the same language and followed the same customs. Yet, as in the case of Sparta, so through all Greece, a few centuries would see the races which called themselves Greeks, comprising no more than a tenth or a twentieth part of the old strain, all the rest being represented by the importation of foreign elements.

Infanticide, therefore, which was an advantage to the savage, always on the brink of starvation as each winter came round, ceased to be useful as civilisation progressed; for the race which sought its own ease and spent its resources in ministering to luxury, while it destroyed its infants, would be crushed out by or absorbed into the surrounding races which to some extent utilised their increasing resources in rearing a larger proportion of their children. These races must overflow, these must emigrate, these must become dominant; while the other, though its name may be perpetuated, will in truth go out of existence.

Infanticide in Rome.

This was perhaps an element in the success of the early Romans. Infanticide had once, as we have reason to believe, been very general, but when the laws of the Twelve Tables were promulgated, it must have been very much on the decline; for, as Cicero tells us, these laws enacted that "children of notable deformity were at once to be slain". (*De Legibus*, iii., 8.) Now it is well known that in the earliest institutions, the father of the family had the power "to restrain, to scourge, or slay any member of his family" (Carolus Ligonius, *De Antiquo Jure Civium Romanorum*, i., 10), and the enactment of the Twelve Tables shows that the actual exercise of this legal right was falling somewhat into desuetude when it became necessary to legislate for the destruction of those notably deformed. At a later date even this most profitable

of all forms of infanticide became limited. The father lost the right to kill his new-born child if it were a male, or if it were the first-born daughter. He was still at liberty to destroy any subsequent daughter, if he obtained the consent of a jury of five of his neighbours. (Ramsay, *Roman Antiquities*, chap. ix.) That the permission was frequently enough utilised is clear from Plautus and Terence, whose plots sometimes hinge upon the reappearance of children supposed to have been destroyed, though it is to be remembered that these were rather Greek than Roman stories.

It is probable that although no great proportion of Roman infants were slain, yet as in China of the present day, among a large population, a small proportion would be quite sufficient to keep the fact of infanticide strongly enough in evidence. Gibbon says (chap. xliv.) that "if the father could subdue his own feeling, he might escape, though not the censure, at least the chastisement of the laws, and the Roman empire was stained with the blood of infants". But we have reason to suspect this statement of a somewhat loose and rhetorical tendency. The blood of infants is certainly a metaphor, because public sentiment was against the shedding of blood, and the invariable methods of destroying the new-born infant were either to expose or to drown it. There is I believe no evidence that in the times of which he speaks the Roman laws ever censured infanticide. Lecky, following Gibbon, says that "infanticide was forbidden, though not seriously repressed". (*European Morals*, i., 299.) But it is fairly certain that neither abortion nor infanticide was condemned till the later times of the empire. The public sacrifice of children for religious purposes existed in Rome as late as the time of Hannibal. (Livy, xxvii., 37.) It is impossible that any law could have denounced the destruction of children when we find the most respectable writers commending the daily practice of the custom. Pliny says (iv., 29) that infanticide is really a lamentable necessity "seeing that the fertility of some women is so over-abundant in children that it needs some such practice to counterbalance it," while the lofty soul of Seneca saw nothing reprehensible in it. In his disquisition *Concerning Anger* (i., 15) he says: "Children also, if weak

and deformed, we drown, not through anger, but through the wisdom of preferring the sound to the useless".

Suetonius has several incidental allusions which prove that infanticide was accepted by the Romans in a very matter-of-fact spirit. For instance, in describing the public grief for the death of Germanicus, he mentions that many women exposed their infants. (*Caligula*, v.) The opening of the fourteenth episode of the *Golden Ass* of Apuleius describes how a husband before going forth on a journey directed his young wife that the coming babe if a girl was to be destroyed; the whole being related as a perfectly natural and common occurrence.

There is every reason to believe that the increasing infanticide of girls was one of the insensible causes of Rome's decay. Whilst their own women were kept thus in disproportionate numbers, beautiful slaves and attractive adventuresses gathered in Rome. By slow degrees, as in Greece, the foreign element infiltered itself into the Roman blood, which, all unconscious of the change, ceased to be truly Roman. In earlier days when larger families were the rule, and a profligate extravagance had not as yet wasted the virile strength of the citizen on ceaseless intrigues which had no influence in perpetuating the national character, Rome had held her own and spread out over other lands. But even so early as the reign of Augustus, laws against celibacy and for the encouragement of reasonably large families became desirable.

Denis thinks that, according to the laws at least, a man could be prosecuted for slaying his infant, but not for exposing it; still less could he be interfered with if he resorted to abortion. (*Histoire des Idées Morales*, ii., 109.) But he describes how a public feeling grew up against these practices. The declamations of Epictetus and Musonius and the quiet sarcasms of Tacitus suggest the growth of more merciful opinions. It had become a well-known custom in Rome for mothers to abandon their girls at the foot of a particular column. This was regarded as a softening of the fate of the little ones; for a class of men frequented the place who, while they suffered the least promising to die, gathered up the little

baby girls who suited them, and trained them to become attractive and often accomplished courtesans.

But at least it salved the feelings of the mother if the babe had some chance of life, even if its fate was to be squalid and probably vile. But a difficulty arose, for when the speculator had gone to the trouble and expense of rearing and educating one of these girls, the parents sometimes claimed her, possibly smitten with a late remorse, or perhaps finding that one daughter the more would be useful for the making of alliances. Then they would claim the girl and defraud the speculator of his gains. The result seems to have been that the number saved as foundlings was tending to diminish when in the year 331 A.D. the first of the Christian emperors, Constantine, passed a law giving these men the exclusive possession of such foundlings, and barring the parents from all future claim, except on adequate payment. (*Codex Theodosii*, v., 7, 8.) Not till the year 374 A.D. was infanticide made a crime, when the Christian emperor Valentinian punished it with death. Yet the progress of legislation for the remaining centuries of Roman power shows that though the Christian teachers strongly denounced it, the practice remained common enough.

Teutonic Infanticide.

The transition from barbarism to civilisation has in equal measure always witnessed a decline, though not an entire suppression, of infanticide. The Teutonic races all passed through the stage. Tacitus praises the Germans because they held it scandalous to limit the number of their families, but the following sentence (*Germania*, xix.) is very rhetorical, and as Lecky suggests (*Morals*, ii., 340) the whole passage is to be taken rather as an indirect way of scolding his own people, than as a sober statement of truth about another. Guizot (*Civilisation*, i., 429) regards the picture which Tacitus draws as being analogous to the portrait Fenimore Cooper gives of the Red Indians. At any rate, Tacitus is certainly wrong as to the absence of infanticide among the Germans. Grimm declares that "all the Teutonic sagas are full of the exposure

of children, and there can be no doubt that in the early days of heathenism it was lawful". (*Rechts-Alt.*, p. 455.) Müller says (*Hist. of Iceland*, p. 146) that all the Teutonic races in early times had the right of exposing their children, but in course of centuries it came to be exercised by only the poorest, a man rich enough to be able to support his children incurring much obloquy if he destroyed them. It is related that when in 1000 A.D., the Norsemen of Iceland were converted to Christianity, they stipulated that their right of slaying their infants should not be removed. In spite of the agreement then made, the Church authorities twenty years later abolished it, but we may well believe that the practice, though condemned, continued for a long time after.

In the laws of the Visigoths, we read that "if anybody rescues and brings up an infant which had been exposed by its parents, and if these afterwards claim it, they must give either a slave or a suitable sum of money to pay for the trouble of the foster parent," a regulation which clearly shows that infanticide was not illegal among that people in the seventh and eighth centuries. (Lindenbrog's *Codex Legum Antiquarum*, bk. iv., tit. 4.) In the same collection, other incidental allusions seem to show the legality of the practice in all Teutonic races. But in the laws of the Burgundians, Salics, Ripuarians, Visigoths, Allemanns, Bavarians, Saxons, Frisians, and Lombards there are enactments against abortion, which though by no means severe, indicate that public feeling was against it. In the laws of Cnut (quoted Stephen's *Hist. of Crim. Law*, i., 54) we read that a woman for adultery loses both nose and ears, but for abortion is subject only to the penance of the Church. Du Chaillu in his *Viking Age* (p. 367) quotes many sagas that show how the gods of the Norsemen were appeased by sacrifices of children, and Professor E. G. Geiger (*History of the Swedes*, p. 31) says that among all the Scandinavian peoples the father was without blame if he exposed his new-born child. If he failed to raise it up and sprinkle it with water, the attendants were to infer without further instructions that it was to be destroyed.

The Celtic races also were addicted to infanticide. Lubbock states that the examination of the earliest tumuli of

Great Britain has convinced the ablest archæologists that it was practised among the ancient Britons. (*Prehistoric Times*, p. 176.) The validity of their views has been challenged, and as far as Scotland is concerned, indignantly denied, but Cæsar distinctly states of the Gauls that they had the power of life and death over their children. (*De Bello Gallico*, vi., 19.) The laws of the Welsh—Howell's code for instance—as late as the eighth and ninth centuries, though very minute in the detailed specification of offences, contain no word as to the slaying of new-born children, and indeed as the only punishment for any sort of murder was a payment to the nearest kinsman, it follows that the murder of one's own child must have gone unpunished, though it scarcely follows that it was unreprehended.

The same sort of reasoning applies to mediæval England. No law of the Saxons, however minute in its details of the penalties for murder of various ranks and both sexes, has a word as to infanticide. There is reason to believe that though the Church set its face most sternly against the practice, the milder views made but moderate headway; for in 680 A.D. we find Archbishop Theodore contenting himself with the prohibition of the sale of children after they had reached the age of seven years. Half a century later, another bishop threatened to excommunicate those who sold their children at any age. Kemble, in his *Saxons in England* (i., 198), says that though they were generally illegitimate children who were thus disposed of, chiefly to Ireland, it is to be feared that legitimate children also were often enough sold into slavery. (Compare Hallam, *Mid. Ages*, chap. ix., note.)

Through the middle ages, while men still had the right to kill their slaves and the only punishment for any murder was a payment of money to the relatives, it is in the last degree unlikely that any man was interfered with for merely slaying his own infant. Pike, in his *History of Crime* (ii., 469), states that in the records of the inquests of the fourteenth century, all accusations of murder refer to full-grown persons, whence the inference clearly is that the administration of justice took no notice of the deaths of infants. Condemned no doubt from a religious point of view, infanticide was no concern of the law

until the reign of James I. In the year 1623, though the wording of the Act then passed suggests that it had been for some time punished, the growing feeling of the time had begun to include it into the general term of murder, and this particular statute was intended to give definite legal force to the new interpretation of old customs. As for abortion, it appears for the first time on our statute books at the end of the reign of George III., when it was decreed to be a felony.

In Spain even so early as the seventh century, the influence of the Church secured that the murderer of his own child should be put to death or blinded; and under the same teaching, Charlemagne, a century later, decreed that the offence should be punished as homicide. Up to that time the French had the right of exposing their children, subject to the limitation that if the babe had once tasted honey it could not be destroyed. (Michelet, *Origines*, p. 8.) The right of selling children was in full force so late as the ninth century, as is shown by the legislation of Charles the Bald, which was intended to check the practice. It is asserted that not till about the end of the fifteenth century did it become disreputable for parents to sell their children. (Spencer's *Descriptive Sociology*, France, p. 40.)

Infanticide in Modern Civilised Races.

All nations now in the stages of middle or advanced civilisation, before reaching what I have called the cultured standard, exhibit the same decay of infanticide as a practice reprehended but not punished. That, for instance, is the state of things in China, where the practice is unlawful though not generally disapproved. But whereas in a higher savage or lower barbarian condition some thirty or forty per cent. of the children who are born would thus perish in their earliest hours, not above three or four per cent. at the utmost are destroyed in China. Staunton estimated the number at 2000 yearly for the city of Peking, which would amount to four or five per cent. of the total births for that city. This, however, was a guess, and it is almost certainly exaggerated. And yet

it is hard to form any just idea of the truth. Barron asserted that 9000 were put to death each year, but the Rev. Dr. Abeel (*Residence in China*, p. 109) estimates the number at 4000. On the other hand the Rev. W. C. Milne, who lived equally long in China, declares that all this is mere nonsense (*Life in China*, p. 40), and that in Canton, at any rate, infanticide was rare. Dr. Williams (*The Middle Kingdom*, ii., 262) states, however, that though the practice is rare in Canton it is more common in Amoy. He thinks that in general the proportion of children killed is not great, but mentions two provinces wherein the practice prevails to an atrocious extent, twenty or thirty per cent. of the female children, therefore ten to fifteen per cent. of the total number of infants born, being put to death.

Perhaps we are safest to go with Archdeacon Moule when he expresses the opinion (*New China and Old*, p. 179) that "infanticide must be regarded as a local and spasmodic crime rather than as a chronic and national evil". He thinks that in general infanticide is distinctly connected with the pressure of want, which arises after floods, famine, or war. Henry Norman, in his work *The Far East*, feels certain that infanticide is very prevalent in the lower and middle classes. He gives explicit numbers supplied by a lady who said that 160 women she had interrogated were the mothers of 631 sons and 538 daughters then living. No sons had been killed, but of daughters, 158 or twenty-three per cent. had been put out of the way. Professor Douglas regards such a condition as characteristic only of the poorer classes in times of great distress. The extent to which infanticide prevails has, he says, been much exaggerated. (*Society in China*, p. 353.)

There can be no doubt that the better feeling of China has for centuries past reprehended the practice. There have been in existence, for seven centuries at least, societies which gather funds to lessen the evil. Archdeacon Moule speaks of one he knew at Ning-po, and mentions how when there was a rumour of infanticide accomplished or threatened it pounced down upon the perpetrator and caused him to be punished. This and other societies spend large sums in offering pecuniary assistance to parents who, in despair of feeding their children,

are under the temptation of killing the latest comer. The missionary Doolittle says that the Chinese Government issues edicts against the practice, which is illegal though still common enough. He thinks that all the better half of the people would disdain to slay a child, but the lower half are always only too ready to drown all daughters after the first one or two. He gives details (p. 495) which clearly show that the practice is disreputable. Archdeacon Moule speaks of the protest which Buddhism and Taouism make against it as "feeble, suppressed, and inarticulate". On the whole, we may say of infanticide in China, as of gambling in England, that it is against the law, and contrary to the feelings and customs of the more respectable part of the population; yet it exists and asserts its right to exist by reason of a considerable body of public opinion which does not condemn it.

To a less extent the same was till recently true of the Japanese. The *Encyclopædia of India* speaks of its former prevalence there, but of its recent decrease. Fauld in his *Nine Years in Japan* mentions infanticide as one of the several causes which have kept the population stationary. It is a notable fact that in countries where a struggle for the repression of this practice is going on, the death of children is often commuted into the sale of them. It cannot arise till there comes that degree of civilisation which induces a man of means to look forward far enough to make a profit out of children so purchased. When that degree is reached, however, the indigent parent indulges the growing reluctance to cause the death of his child, and at the same time secures some small profit out of his sympathetic restraint. In Japan, the government carried on a profitable trade in the purchase of girls of from six to eight years old. Sir Henry Loch, Mr. Laurence Oliphant, and the Rev. Gray Dixon all describe the conditions of the sale, according to which some 20,000 girls used to be in the employment of the government as courtesans. At the age of twenty-five they were dismissed with a pension, but they spent some thirteen of their freshest prime in a life of prostitution, though not necessarily of degradation, parents freely selling their children for the purpose. Yet, as Oliphant tells us (*China and Japan*, ii., 205), the Japanese children are kindly

treated; they are never beaten, and are generally well brought up.

In Siam infanticide is rare, for motherhood is considered honourable and daughters are cherished as much as sons. (Mary L. Cort, *Siam*, p. 167.) Yet the same writer (p. 216) states that parents readily sell their daughters to the managers of theatres well knowing that they are to be trained as courtesans. Dr. Brown, in his work on the *Peoples of the World*, tells us that the Anamese, though apparently not addicted to infanticide, are accustomed to sell one or two of their children if their families threaten to become too large.

It is well known that among large sections of the Hindoos, infanticide prevailed within recent times. Lieut.-General Walker estimated that about 30,000 female children were annually put to death in Cutch and Gujerat, a rate amounting to about one-fourth of the total births, and therefore to about half of the girls born. Infanticide is known to have been very general in Oudh and all the Punjab as well as in Baluchistan. But it was probably in Rajpootana that it existed in the greatest strength. Watson and Kaye assert (*Peoples of India*, vol. iii.) that "no criminality either by law or usage was ever attached among the Rajpoots to infanticide". The child was smothered in milk or else opium was smeared upon the mother's breast in quantity sufficient to cause immediate death. The *Cyclopædia of India* asserts that in one of the districts of this province, while there were 82,400 boys, there were only 35,137 girls at the 1874 enumeration, a discrepancy which clearly showed that more than one half of the girls had been destroyed. The British authorities have had to struggle for seventy years to suppress the practice, which is generally regarded as having ceased in 1868; but it is supposed that the natives still contrive to rid themselves of female children to a considerable extent without incurring the risk of the law. The census of 1871 showed clearly that infanticide was a prevalent vice of only the north-west portion of India, the balance of males and females being natural in the Presidency of Bengal, and the females being only a little under their healthy proportion in Bombay and Madras. That census showed for British India as a whole, a total of 98,000,000

males, but only 92,500,000 females (Hunter's *India*); a discrepancy which renders it probable enough that female infanticide had generally prevailed, but on the other hand shows that the proportion destroyed was on the average of all India not greater than that which now prevails in China. In very many parts of India the former custom of selling the children whom a parent was unable to support pointed to a process of softening an antecedent custom of infanticide.

To pass in review all the nations classed as lower, middle, and upper civilised would be only to prolong the same sort of somewhat indefinite evidence; but the general effect would certainly be to show that at this stage infanticide tends to die out, sometimes retaining its virulence in particular localities by reason of local superstitions or necessities, but in the aggregate steadily declining. Only among the cultured races is it ranked with heinous crimes and regarded as utterly incompatible with respectability. Certainly at this stage, there is some slight tendency for infanticide to reassert itself in consequence of the great development of the idea of chastity, and the extreme antipathy shown to the mothers of illegitimate children. Yet this is a small matter in comparison with the infanticide whose rise and decline we have been considering. In England, according to Newsholme's *Vital Statistics*, the average annual number of cases of infanticide from 1858 to 1886 was only 186 children out of every 1,000,000 born, a rate less than the 300th part of that obtaining in China, less than the 2000th part of what is common in savage life, and therefore not calling for attention in this connection.

Accordingly, it is very clear that infanticide, which is unknown among the lowest of mankind, gains a stronger and still stronger footing as men grow more intelligent, while yet their intelligence is mainly selfish; but that after reaching a maximum among the barbarians of the lower levels, it gradually dies out as the more sympathetic side of human nature asserts itself, till at last in the cultured races it vanishes, leaving its record only as a universal though ugly stage in the progress of our race.

It was in fact man's artificial way of effecting what would after all have come about in a slower and perhaps more cruel

way. For nature must sooner or later have established the type which, by being less prolific, was better suited in a healthful way to adapt itself to new conditions.

Self-Restraint the Nobler Substitute.

Under normal circumstances, in a population of 1000 persons there will be about 160 women of an age to bear children; if each of these had a child every two and a half years, which is somewhere about the natural rate, there would be sixty-four births each year. According to the *Statesman's Year Book*, this high rate is attained in South-East Russia, where from sixty to sixty-five births occur to every 1000 of the population. With a reasonable death-rate, this would be sufficient to double the population every sixteen years, that is to multiply it seventy-six times in a century; an increase with which the progress of food-production would fail to cope. A heavy death-rate therefore naturally accompanies a birth-rate so high, and it presses chiefly on the children themselves, of whom fully one half die in their early years. Thus the threatened redundancy is checked by a process which is wasteful and cruel. Each woman, by bringing forth twice as many children as are really needed, helps to keep the community poor; she diminishes the individual care given to each child, and she prepares for herself an inevitable train of sorrowful experiences.

In the competition of race with race there is therefore always a tendency to weed out the strains which are too prolific just as inexorably as those which are inclined to barrenness. Had man in no way interfered there would have arisen, very slowly no doubt, a race emerging from the crowd, whose characteristic would have been a birth-rate nicely adapted to yield the most favourable results. But man interfered first by abortion and infanticide, and afterwards by means more in consonance with growing sympathies; and now we see the cultured races of Europe effecting the same result by processes of self-restraint, mainly by postponing the age of marriage and by increase of celibacy.

Among savages of all grades the average of forty-six races shows that the men appropriate to themselves the girls of their tribe at the age of 12·2 years. Among barbarians, girls go through a rude marriage ceremony at 13·98, that is practically fourteen years, this being the average of fifty-eight races. Among the civilised races the age of marriage reaches 16·9 years as the average of twenty-four peoples, such as Chinese, Japanese, Siamese, and so on. But in the cultured races, the age at which spinsters are married is very much higher.

The mean age at which women marry in the seven leading nations of Europe is given by Mulhall as being twenty-seven years, but as this includes a considerable proportion of second marriages, Newsholme, in his *Vital Statistics* (p. 47), has employed an apparently reliable adjustment which shows that the average age at which spinsters in these countries are married is 24·6. Moreover, the statistics of all Europe indicate a very perceptible and steady rise in the age of women at their marriage. For a long time back the brides of any year have been a fortnight older on the average than those of the preceding year. Ansell has shown that among the more highly educated classes of Europe the average age of a bride at marriage is 26·4 years, while the daughters of labourers and unskilled workers are married at 23·2.

This increased abstention brings many benefits to the race. The girl who begins the strain and cares of motherhood at the age of thirteen will rarely attain the fine constitution of the girl who is carefully nurtured in the easy charm of maiden happiness to the age of five-and-twenty. Moreover, the child born of so immature a mother starts life a rickety creature as compared with the child of the other. There would be some compensation if the girl-mother were likely to live longer and bestow on her progeny a lengthened period of parental care. But the truth lies quite the other way. It is the savage mother who dies early and gives the lessened care to her children. In England, the average duration of the joint lives of both parents from the date of their marriage is twenty-seven years; in Germany and France, it is twenty-six; a period quite sufficient to do ample justice to the family. For if a woman is married on the average at twenty-five, and dies at

fifty-two, she will leave no tender infants, the youngest being perhaps eight or nine years, but if when the youngest is at this age, only one of his parents is removed by death, the other has still, as statistics show, the prospect of eight or ten additional years, so that the elder children of the family are mature men and women, while the younger are on the average just entering on manhood or womanhood ere they suffer the entire loss of parental care. Amid the greatly higher death-rate of savage life no such lengthening of this period can be at all common.

It is true that the savage girl who has her first baby at the age of thirteen will probably have no more after she reaches thirty, while the cultured women who begins at six-and-twenty will continue to increase her family till she is over forty. But the net result is to diminish the number of the children, for Galton has shown that in England, girls who marry at the age of seventeen are likely to have nine children; those who marry at twenty-two, an average of seven and a half; if married at twenty-seven they will have six children; and if they wait till the age of thirty-two they will have only four and a half on the average. These figures are derived from observations made among the poorer classes. The diminution is probably greater when the whole population is considered, for if the figures were generally true, it would follow that in England where girls marry under the age of twenty-five, the average number of their children would be about seven, whereas the *Forty-sixth Annual Report* of the Registrar-General shows it to be less than five. In another of his reports, Dr. Farr reckoned that if the mean age of women at marriage should reach thirty years the birth-rate would fall to two-thirds of what it now is.

Whatever be the exact rate, there can be no doubt that an increased age of marriage diminishes the number of offspring. The Australian woman, according to Brough Smythe, gave birth on the average to about ten children; Watson and Kaye consider that the hill savages of India average eight children to each woman, while Lieut.-Colonel Marshall found the average of the Todas to be 6·7 as far as he could discover. Lichtenstein considers that Kaffir women had an average of from eight to ten children, and wherever travellers have taken

pains to discover, not the number of children actually alive, but the number that had been born to a savage woman, the result comes out about seven to ten for each. But in Europe of the present day the number is only 4·47 as the average of the ten most progressive nations. In the year 1876 each married woman in England had borne an average of 4·63 children; in Germany, 4·92; in Austria, 3·73; the highest being Italy with 5·15, and the lowest France with 3·42. (Registrar-General, *Forty-sixth Annual Report*.)

But the second means of reducing excess fertility is in the increasing number of celibates that are found in cultured communities. The report just quoted shows that in England about one woman in every eight remains unmarried. It by no means follows that the unmarried women are not mothers, yet it is certain that in countries like England, the United States, France, and Germany a very large proportion of those who are never married lead strictly virtuous lives. Taking the registered number of illegitimate births as a basis of calculation, I find that in these countries seven-eighths of the unmarried women over the age of thirty have never had a child. This celibacy of the women in cultured races reduces the total number of offspring by about eleven per cent.

If we join the effects of celibacy to those of deferred age of marriage, which is celibacy also, though only temporary, we find that of women who might be married, being over the age of fifteen, there are in England only 49·6 per cent. actually married; in Scotland, 44·4; in Ireland, 40·1; the average of all Europe being that only 54·7 per cent. of the women of marriageable age are married, and if allowance be made for mothers of illegitimate children, considerably less than sixty per cent. of those who might be mothers have actually taken upon themselves the cares of maternity.

Celibacy is a thing unknown in savage life. Curr says of the Australians that "no girl is allowed to remain unmarried after the age of fourteen, and no widow who is on the sunny side of forty-five is allowed to wear her weeds above a fortnight". The same was true of the Tasmanians, and Holden says of the Kaffirs "there are no old maids, all women are either wives or concubines," and Westermarck gives a list of

thirty races in which celibacy is practically unheard of. (*Hist. of Human Marriage*, p. 135.) Schoolcraft says (v., 655) that if an Indian is left a widower, he is supposed to suffer a year to pass before he marries again; but he speaks of the general prevalence of tricks to evade this customary law. In Japan and China, old maids are almost entirely unknown. We meet the same feature in antiquity. At Rome, the service of the sacred fire required that six maidens should vow themselves to life-long virginity. Gibbon notices with what extreme difficulty that small number could be procured, and how often those who did so devote themselves, incurred by their immorality the dreadful doom of being buried alive. There were no old maids in Greece; and in India, Manu (ix., p. 88) laid it down that for a girl not to be married at twelve was a disgrace. Among all the Aryan races, as we are told by Prof. Geiger, "an elderly maiden received general disrespect," a feeling which still lingers a little among ourselves in the frequent ridicule attached to them. Even where this is not the case, the fate of an old maid is regarded as one deserving of pity. Souvestre in his *Philosophe sous les Toits*, when, in a fine burst of indignation, he says, "cursed be he who has been able to find a subject for sarcasm in an involuntary misfortune," gives voice himself unconsciously to this feeling. But the sentiment of cultured nations is ceasing to award punishment, ridicule, or even pity to the woman who chooses to lead her own life in her own way, like the great Elizabeth "in maiden meditation, fancy free". It is useful to the community as a means not only of reducing the redundant birth-rate, but also of increasing the care for those who are born for every one knows in what a large proportion of homes the maiden aunt or the grown-up sister is as a second mother.

Lengthened Period of Parental Care.

All these means of limiting the number of births are accompanied by a tendency to increase the period of parental care. Among savages that care never is of any great efficiency after the age of ten; among barbarians, girls remain in the

father's home till the age of fourteen, and boys probably average as much or more. In a civilised community, the young folks almost always spend about sixteen or seventeen years under the parents' roof, and when they go out from it there is an amount of interest taken by the parents in them and in the grandchildren such as is not known in lower stages. In the cultured races of to-day, the average boy or girl is more or less dependent till about the age of twenty, and leaves the parental home perhaps at five-and-twenty.

But it is rather in the matter of systematic education that we can more properly estimate the progress of the cultured races. A regular school education begins to be characteristic in the civilised grades; scarcely noticeable in the lower civilised, but definite enough among the wealthier classes of races such as the Persians, Afghans, Siamese, or Burmese, and among nations of antiquity upon the same level, the Greeks of the time of Pericles, the Romans of the later Republic, the English of Plantagenet days. Bancroft says that the children of the Aztec nobles attended school for six or seven years, but those of a class somewhat inferior attended other schools for a less time. Two thousand years B.C. systematic education appeared in China, and though it has never spread to the poorer classes it has been a matter of much national solicitude. In India (Elphinstone, p. 186) and in Peru (Prescott, p. 117) schools for the sons of the well-to-do were valued institutions, while the Japanese have long held them in esteem, the children of the nobles terminating their studies at the age of fifteen. (Steinmetz, *Japan and her People*, p. 263.)

But consider how notable a feature the school has become in cultured races. How great are the efforts to secure for every one, even the very poorest, a good elementary education, and how strong is the tendency to prolong the period of school life. I have calculated from the official statistics of the Australasian colonies that while practically every child is being educated, the average age at which they leave the primary school is 14·7 years, about one in every fifteen proceeding to secondary schools wherein they remain till the age of seventeen. About one out of every 160 children eventually proceeds to the university, where he remains till the age

of nearly twenty-one. And the proportions of scholars at each grade are steadily on the increase. If there were the same facility in obtaining statistics for Europe, we would find in nations such as France, Germany, England, very much the same sort of results.

And there is room for a great though not indefinite extension of the process in the future. We perceive in all departments a most wonderful development of activity in regard to education and a determination never before seen that each sex shall share in equal measure all its advantages. In a few centuries it will probably be an almost universal custom for the youth of both sexes to continue their school and college education to the average age of twenty years or more; for it is clear that the growth of labour-saving machinery, and the many ingenious ways in which man is learning to satisfy his needs with lessened toil, will greatly reduce the amount of labour required of the average life. Steady, well-directed effort of twenty or thirty years may secure all that the average man requires for a lifetime; the huge quantities of capital which every generation is now leaving behind it must lighten the cost of production in the future, and though it is true that man's scale of comfort is on the increase, yet there is a balance in favour of shorter periods of labour. Now if the question be asked, How will the increasing leisure thus secured be utilised? we may with certainty reply that a considerable portion of it will be used for extending the preparatory period of youth, that men will not only retire from labour earlier but begin it later, and that, when they do begin it, they will be increasingly prepared for it. Because on the one hand, the body of knowledge required for proficiency in any trade or profession is always augmenting, and competition will be impossible to those whose information will not seem encyclopædic in comparison with that now common in the same lines of activity; on the other hand, there is an increasing tendency to take pleasure in learning; there never has been an age in which the passion for self-improvement has been so marked as in this. Should the present progress continue, a century or two must see the average youth and maiden educated more highly than the honour graduates now turned out from our

universities. All of which means that with increasing intelligence and diminishing numbers of offspring there will come a prolonged period of parental care.

Elimination of the Less-Parental Types.

Meanwhile all the savage races will have gone, and the barbarian will have been extinguished or merged in the cultured populations now dominant in every quarter of the world. As for those who are now in the lower stages of civilisation their doom will depend on their capacity to accept the new conditions; for of a certainty, the more competent race will slowly but surely supplant the incompetent, and in nothing will the superiority of the victorious strain be shown so clearly as in its display of parental care. For it is in the schoolroom and the wisely ordered home-life that the foundation is laid for all the industrial and military triumphs of the future.

And the same process which will purge mankind of its inferior races will in much the same way purge the cultured races of the less desirable elements which at present they contain. There have been those of late years who have expressed a fear that the trend of evolutionary processes in cultured society is now against the survival of the better types. It is the educated class, they say, which exhibits whatever there is of self-restraint and which propagates slowly, while the less educated exercises but little control over its rapid multiplication, the criminal and improvident classes being particularly likely to swamp the others by their unrestrained licence of reproduction. But if this were true, then in the same way the savage who reproduces his kind so much more freely than the civilised man ought to multiply at a rapid rate. The element of parental care, however, counts for a very great deal in the process, and just as the want of it eliminates the lower races, so does it eliminate the inferior elements of each race. According to an estimate made by Mulhall, 100 wealthy and professional families in England produce on an average 313 children, 100 middle class families have 360, while 100 of the poorer families have 370. Here we find a very distinct pre-

ponderance in favour of the poorer classes. But consider the death-rate. Only 8·9 per cent. of the children of the wealthy die before their fifth year, while of the children of the poor, 35·17 per cent. die ere they reach that age. The figures are subject to some adjustments, being uniformly too low, but the principle is sound, and the net result leaves a mortality among the children of the wealthy which is not more than one-third of that which prevails among the poor. Hence while 100 families of the poorer classes will rear 240 children over the age of five, the same number of wealthy families will rear at least 280.

Thus the law that progress lies with less offspring and greater parental care obtains to the very highest domain of the animal kingdom, and works a beneficent change in the constitution of society. For if we suppose that the well-educated classes are now some ten per cent. of the whole, and that the present rates as above described will continue unchanged for three centuries, the offspring of the present well-educated classes would then constitute thirty-five per cent. of the whole, while the offspring of the present less-educated classes, instead of being ninety per cent., would be only sixty-five per cent. of the whole. A thousand years of this process would leave the descendants of the inferior strains at less than six per cent. of the whole population.

But the case is really much stronger than this. We are speaking as if the wealthier classes were all good parents, and as if the poorer people uniformly failed in this respect. Suppose, however, that we could make a division more to the purpose and keep the statistics of two great classes, the people of orderly lives and those of disorderly lives; on one hand the good fathers and mothers; on the other hand parents who bring children into the world with little sense of any responsibility therein implied. The latter we would find the more prolific, and that to no small degree; but then the mortality of their offspring would be so great as to deprive them of all advantage, and the moral class would supplant them at a rate much more rapid than that of the case for which I have just calculated the result.

Ruskin says (*Time and Tide*, letter 18): "The marvel is

always to me how the race resists, at least in its childhood, influences of ill-regulated birth, poisoned food, poisoned air, and soul neglect". But is it very certain that the race does really resist them? Is it not rather the truth that in the course of half a dozen generations the excessive mortality which occurs where there is least care will by invisible degrees make the less desirable elements of our populations a steadily vanishing quantity?

On the whole, therefore, we find that the progress of society depends less on education and the transmission of acquired characteristics from one generation to the next, than on a steady progress of elimination of inferior strains. It is not that the criminal is educated and trained to be a good citizen and becomes the father of children better than himself. This may occur under very favourable circumstances, but in general the advance that is made depends much more upon the heavy mortality of the criminal's children and grandchildren.

There are various ways in which we may check this conclusion. For instance, in a cultured community, those whose passions are ill-regulated and whose lives are badly ordered will supply the larger part of the illegitimate children. Now the Registrar-General's reports show that 38·8 per cent. of illegitimate children die before they are a year old, while only 19·2 per cent. of legitimate children so drop out. The difference is not so great on the Continent as in England, but in Bavaria, where it is least, Kolb states that of legitimate children twenty-three per cent., and of illegitimate thirty-five per cent. die before the close of their first year. For the average of all Europe, it is probable that nearly twice as large a proportion of illegitimate children die as of legitimate. Moreover, as Mulhall tells us, the childbed mortality of unmarried mothers is about double that of those who are married. If we regard that class of the population which propagates illegitimate children as being on the whole a class of inferior morality, it follows from these and other accumulated reasons not here to be enumerated, that the inferior strains will be always in steady process of vanishing.

One more statistical fact may be mentioned as a sample of many of the same class which all work in the direction of

elimination of the undesirable. Kolb's researches show that of children suckled by their own mothers, 18·2 per cent. die in their first year; of those suckled by wet nurses, 29·33 per cent.; while of those artificially fed in their own homes, sixty per cent. die ere the age of twelve months. What an immense preponderance for the kind and natural mother over the unnatural! How evident it is that a want of maternal love will work its own disappearance, and that the unnatural strain will die out before the more natural. Moreover, Kolb assures us that eighty per cent. of the infants reared in institutions die before they are a year old, a fact which shows that those wholly unnatural mothers who abandon their babes to be brought up in foundling hospitals, even though they were three times as prolific as the average, would leave less than the average of offspring. For in the highest races of men as in the lowest species of fish, a little parental love and devotion is of more efficacy than a great fertility.

Thus have we traced the operation of the same great law along all the line, and perceived that parental sympathy has steadily developed because it has always been a notable element in securing the survival of a species or of a superior strain within a given species. Sympathy is as much dependent on nerve development of one kind as intelligence is on nerve development of another; but at all times the two have been strictly bracketed together, for increasing intelligence always implies a more prolonged period of immaturity, and this demands an increasing parental sympathy. Thus the English child which should receive no more parental care than the Australian piccaninny would almost certainly die in its infancy. If it chanced to survive, the want of schooling and home training would leave it to face a hopeless struggle in the competition of rivals better equipped.

It will be subsequently perceived that parental sympathy is the basis of all other sympathy, and that sympathy in general is the ultimate basis of all moral feeling, so that we may regard the five chapters here ended as having been occupied in laying the foundations of a theory of all ethical progress. No time in the life of a woman is so purely happy as that when she has her babe to tend and fondle; no feeling

in all the experience of a man is more delightful than that called forth by the sight of his little children waiting by the gate to joyously greet his return. In these primal pleasures, in these deep-seated springs of natural emotion are to be traced all the subsequent developments of our moral nature, which are always the truer and more profound in proportion as they approximate in character to the simplicity of their original source.

CHAPTER VII.

THE GROWTH OF CONJUGAL SYMPATHY.

The Sympathetic Type Leaves the Greater Progeny.

How great is the power of parental sympathy in preserving the worthier types must now be abundantly clear; but there is a second form of sympathy—that of the mated pair, whose growth is of wondrous aid, almost doubling the efficacy of the mother's love or the father's alone. Though the one be devoted to her offspring, and the other full of solicitude for them, yet if they two be out of sympathy so as to fail in a harmonious and permanent co-operation, the family is torn asunder with disruptive forces. Never can it be that the finest training of the young will spring from a wedded pair who are unkind or unsuited to one another. It must often happen perhaps that parents ill enough matched are kept together by their love for their children, a bond of potent union; but better far it is when the union is already there, and the solid strength of accordant effort is bent harmoniously to the furtherance of the life-long task.

And thus it comes that conjugal sympathy is an adjunct of notable power in respect to parental care. But it has another and on the whole an earlier aspect. The lower an animal is in the scale, the more simply does its propagation rest upon short outbursts of sexual passion. But those of higher intelligence are won as much by mental graces as by visible charms. The season's outburst becomes converted by degrees into a companionship for life, and this is very strongly dependent on kindness of manner and a capacity for single-hearted love.

Sweetness and graciousness of disposition, whether in

woman or in man, are decisive elements in the securing of a mate. The morose and sulky fellow is rarely a favourite with the girls, and is never the suitor who can make the first choice among them. The woman whose beauty is marred with an evil temper, an ungracious manner, will, like Katharine, the shrew so madly tamed, have always the prospect of being neglected by wooers and of seeing her kindlier sisters wedded in preference. Katharine gives her advice to those who wish to be happily mated—

> Fye, fye! unknit that threat'ning unkind brow,
> And dart not scornful glances from those eyes,
> It blots thy beauty, as frosts bite the meads.

In every community there will be always a tendency to breed by preference from the more sympathetic, from those males and females whose manners are most kindly and attractive to each other. It is true that the selective action of this law will be far more operative in a highly cultured community than in one that is ruder. Its efficiency in the Europe of to-day must be several times greater than in the Europe of ten centuries ago, and many times greater than in the average tribe of savages. Yet even in this it must have an influence of its own. For courtship everywhere is efficacious, and courtship, with its insinuativeness, its caresses, its vows of devotion, depends largely on a capacity for sympathy.

It might seem as if, in a tribe wherein the suitor bought his bride, or knocked her down with a club and dragged her fiercely to his fireside, there would be small room for the efficacy of courtship; but as we progress with the present chapter, and view the loose life of races upon the lower levels, we shall find more and more of reason to suspect that the bright and popular young fellow who wins the regard of the women will contribute far more than his due share to the paternity of the following generation; while, in regard to the sympathetic tendencies of the girls themselves, even in respect to their marriages, those who are winning in manner as well as comely in person will be mated to the best of the tribe and secure a somewhat better chance of leaving progeny in distant generations.

Thus even though other causes somewhat interfere with its

action, a graciousness of disposition will be an element in helping to secure the survival of any special strain. The superior sympathy of the weaker sex is due to the fact that with them no counteracting force has been permanently in operation; at all times the gentle and loving disposition has been most readily and most permanently mated. Among men, the need of courage and strength in the hopeful bridegroom, courage to win and strength to keep his bride, must have given to these qualities an importance which would of necessity mask to some extent the undoubted growth of sympathy. Yet none the less the emerging type of manhood would be like that of young Lochinvar, a mixture of both—

So gallant in love and so dauntless in war.

The soldier has always been a favourite with the fair, if only he showed himself as apt at wooing a maid in a corner as at smiting the foe on an open field. And so, even among the ruder sex, we find the growth of sympathy playing an important part, first, in securing for the man his mate, and second, in uniting him with her in the task of rearing his offspring.

We need look for very little indication of this conjugal sympathy in the lower scale of animals. For it was in the parental relation that the general disposition to sympathy found its slow development. Thus not until this primal capacity of emotion had adapted the animal system to feel external impulses of the kind would the selective principle begin to lay a new stress upon it, and slowly divert it into the more indirectly preservative influence of conjugal sympathy.

No instance of anything of the kind is to be found among cold-blooded animals. It is true that conjugal affections, as distinguished from the sexual impulse, have been ascribed to fish and reptiles. But these undoubtedly belong to the class of sentimental misinterpretations of unusual incidents. A male fish is seen to hover for three days round the spot where a female was caught, and he is pitied by soft human hearts as a disconsolate widower. A snake is found not far from the spot where some days before its mate had been killed, and Pliny ascribes the circumstance to its desire for revenge.

Conjugal Feeling in the Lower Mammals.

In truth it is not till we reach the domain of the warm-blooded animal that we see any true development of conjugal sympathies. Even then, along both of the diverging tracks, its progress is but slow, though among birds as a class, the extant species show more of development in this respect than the average mammal. For indeed the lowest orders of the mammalia are little removed in conjugal sympathy above the fish or the reptile. During a brief period the male desires the female, and she is nowise disinclined to receive him. But so soon as their instinct is satisfied, no sort of sympathy unites them. I have kept the monotremes, sometimes eight together in the same enclosure for months at a stretch, and never saw the remotest hint that one derived a pleasure from the society of the other.

The lower marsupials are equally dull to the tender emotions. The koala and the wombat pair for the briefest period once a year, and roam thenceforward in isolation and hostility. The female is devoted to her offspring, but knows nothing of the happiness of conjugal life. Nor is there anything in the life of kangaroo or opossum to indicate that a tenderer bond than mere sexual desire ever draws the male and female together. There are species, however, of which this is by no means true. The phalangers are always seen in pairs, and when kept in captivity they show undoubted satisfaction each in the society of the other, long after the brief period of excitement is over; when they are kept as domestic pets it is often somewhat pretty to observe their affectionate ways.

I have never heard of any trait which would suggest that the edentates are possessed of the smallest conjugal sympathy. The sloths are at all times of the year occasionally seen in pairs, and this may suggest a certain dull predilection for each other's society. The sirenia are sociable, and Brehm tells us (*Säugetiere*, iii., 555) that "both sexes exhibit much attachment to one another, and each defends the other". The cetacea are at all times sociable, and in the pairing season a considerable time is passed in which the couples find contentment each in

the society of the other. But of true conjugal sympathy, that loving sense of companionship which would unite the male and female all the year round, we find no evidence in these lower mammals, and in the next of the orders, the insectivores, out of thirty-two genera (*Brit. Mus. Catalogue*) only one, the hedgehog genus, exhibits any visible development of this feeling. Judging from Brehm's description (*Säugetiere*, ii., 362) the hedgehogs appear to mate with considerable tenderness. "Little inclined to sociability, he is found almost always alone or in company with his consort. The female makes her nest quite close to his, but all the summer weather they dwell in the same nest together. Many a male is unable to separate himself from his charmer at any season of the year, and permanently shares with her his lair. Close by, they play most lovingly together, provoke and chase each other by turns, soon after they cuddle together, as lovers are wont to do." Vogt also speaks of the hedgehogs as being permanently united in pairs, a very early instance of that monogamous union which we shall regard as the true type of conjugal sympathy.

But all the other genera of the order seem incapable of this devotion. It is true that the mole in the breeding season captures a female by main force, shuts her up with jealous care for a month or two within his cellar (Vogt, *Mammalia*, i., 124), and for a short time assists her in the care and defence of the young. (Brehm, *Säugetiere*, ii., 378.) But if at any other time of the year he should meet her, he kills and eats her on the spot. The shrews likewise are unamiable spouses, "never found together, except at pairing time, living a hermit's life; if two shrews meet, there mostly begins a battle for life or death, and the victor at once eats up his antagonist". (Vogt, i., 117.) Brehm gives an equally unfavourable account. "Outside of the pairing season, the sexes never live in peace with one another. At any other time one eats up the other." (*Säugetiere*, ii., 392.) Moles and shrews are endowed with a strength and ferocity so huge in proportion to their size, and at the same time with so great a fecundity, that they would far outnumber other mammals of the smaller sort were it not for this extreme unamiability, which not only prevents all chance of co-operation but also turns the destructive powers

of the species to its own extermination. Even the maternal love is after a time overmastered by this intense individualism. "At first the mother suckles her offspring with much tenderness, but soon her love grows cold, the young depart to find their own sustenance, and lose all brotherly affection. Each shrew from its youth upwards regards as its food all flesh, even if it be the flesh of brother or of sister." (Brehm, ii., 392.)

The bats, although gregarious, exhibit nothing whatever in the way of conjugal sympathy. It seems probable that males and females spend the greater portion of the year in separate retreats. The elder Brehm found in large collections of females not a single male (Brehm, i., 334), and Vogt among seventy males found but two females. (*Mammalia*, i., 99.) The same sort of observation has now been so repeatedly made as to render the conclusion tolerably sure that the sexes are segregated during all the season of the winter sleep. Just before that time begins, if a male can catch a female, he satisfies his instinct, and all the males within hearing gather to do the same.

Among the 117 genera of rodents we find a few in which there is some show of conjugal affection, leading to a family life of tolerable duration. The female squirrel, according to Brehm (ii., 416), collects in March some ten or a dozen males around her, which court her goodwill and fight among themselves for her favour. She makes her selection generally of the stoutest combatant. The others depart and then begins a strictly monogamous union, the couple clinging to each other with a strong affection. Long after the young are born, the father is still there, assisting in their defence, and sharing their early gambols. When they are weaned, he still remains to assist them, and then both parents make ready for a second brood. It very frequently happens that the two families are united, and they may be seen passing overhead among the branches in a long and sportive train, often a dozen or more in number. Unitedly they lay by in autumn their winter store of nuts, but, ere the spring has come, the family is dispersed, each forgotten of the other, and with the advent of March comes anew the period of mating.

Jerdon (*Mammals of India*) remarks that porcupines are monogamous, but I have seen no statement as to the length of the union, nor is it known whether or not they pair afresh each year. This, however, seems to be the habit of most rodents. Beavers, mice, rats, rabbits, agoutis, jerboas, and so forth, all have a more or less distinctly family life, with some little tenderness of affection between the sexes at pairing season; but in every case it seems likely that the care of the offspring is left entirely to the female, and in very few is it recorded that the union lasts for more than a brief season. Brehm asserts (ii., 523) that if, out of the breeding period, a male hamster meets a female he bites her dead, even though but a month or two before he lived with her in the same burrow and helped her to tend the same brood. From which it manifestly appears that the squirrel leads a happier and kindlier life, and the reason is plain why it is able to hold its own with less than half the fertility of the hamster. Not above a tenth part, however, of all the rodents can be credited with any conjugal sympathy, with any of that affection which outlasts the period of sexual excitement.

Nor in the carnivores is there a very manifest improvement, though certainly there is a little. For in every species, the male is obliged to pay court to the female, to make himself as agreeable as possible, and to coax rather than to compel her. The otter is recorded to be extremely affectionate to his mate, and so appear to be also the lynx and the jaquarondi. Flower and Lydekker (*Intro. to Study of Mammalia*, p. 509) state that the lion is united to the lioness by an affection that outlasts the breeding season, and there are many corroborations of the assertion (for instance Andersson's *Lion and Elephant*, p. 40). They certainly fight at times, and I have noted numerous cases wherein lions, tigers, or bears, confined in menageries, have killed their mates. In *Nature* (xv., 70) is recorded a case wherein a bear deliberately drowned his partner, holding her head under water in a trough till life was extinct. Yet in spite of these outbursts of savage fury, it is true enough that the bear takes pleasure in a quiet conjugal sociability. (Andersson, *Lion and Elephant*, p. 110.) Of the ichneumon, Brehm says (i., 569) "in the summer months one seldom sees it

alone, but almost always in the company of its family. The male goes first and the female follows, while the young ones close in the rear, the whole troop winding out and in like a long snake." Species of the dog, cat, or marten tribes which are recorded to hunt at all seasons in pairs may be assumed to be amongst those whose unions are monogamous and tolerably permanent. After this vague fashion, I calculate that perhaps a quarter of the carnivores display a more or less sympathetic attachment of the sexes.

The ungulates are very rarely monogamous, and therefore it is hard to distinguish in their case between conjugal and social sympathy. For in almost all species the males and females keep together throughout the year, but in such numbers that the affection of mated pairs would be lost in the general amiability of the herd. Nevertheless, as the males always occupy the post of danger, and are resolute in defence of the females, as well as of the young, they have an instinct at least somewhat analogous to that now treated of, and equally preservative. For if the chance which the calf possesses of reaching maturity is greatly increased by the devotion of the mother, much more will it be increased when there are added thereto the powerful weapons and furious courage of the father.

Yet there are great discrepancies. In general, the boar remains with the sow long after the season of intercourse, and he is gallant in defending both her and her litter. (Vogt, ii., 67.) Yet the wart-hogs generally wander singly, leaving the sows to go in herds of eight or ten along with their young ones. (Blandford, *Geol. and Zool. of Abyssinia*, p. 241.)

There are antelopes, such as the koodoo, in which the bucks herd alone, and the does also alone through the greater part of the year; yet the majority of antelopes live in polygamous but permanent union. Sometimes a single buck (Jerdon, *Mammals of India*) will attach no less than thirty does to himself. It is by no means the ideal state, for when offspring appear, there is but the one powerful male to defend a large crowd of the comparatively helpless. Yet many sorts of deer are monogamous, and, even where the buck has two or three does, he seems to be their companion throughout life. At

least it is recorded of the roebuck, of *Cervus campestris*, of the reindeer, of some gazelles, and of the sassa and harnessed antelopes that the mated pairs remain in conjugal attachment all the year round, though the period of sexual excitement is brief.

Conjugal Feeling in Birds.

But nowhere among mammals, so clearly as among birds, can we trace the tendency to the formation of stable monogamous unions. Of these the very lowest orders exhibit abundant instances of charming tenderness of feeling between the sexes. It is true that there are many discrepancies. But in the main, the birds are characterised by a conjugal sympathy that has no doubt been an element in securing for them their world-wide profusion. Certainly they needed it more, for whilst the hatching of the egg required the almost constant presence of one parent, the co-operation of the other must have been of the greatest importance.

The lowest of the birds, the ostrich order, show less than any other this interesting feature; and yet perhaps they are quite on a level with any of the mammalia yet discussed, for males and females live in small herds amicably all the year round, and unite to some extent in the hatching and rearing of the young. Some are monogamous, in other cases the male gathers to himself a group of two or three females. Among the swimming birds, most are monogamous, and there is often a great affection between the sexes. Swans seem always to pair for life, and they are noted for their mutual tenderness and fidelity. Geese, ducks, terns, gulls, and others are known to mate with a devoted attachment, and Audubon describes how assiduously the pelicans strive to make themselves agreeable to their mates. (*Ornith. Biography*, iii., 381.)

In the succeeding order, the wading birds, out of 223 genera there are sixty-seven which mate for life in pairs that are unfailingly tender to each other. Among these are the plover, the ibis, the spoonbill, the stork, the screamer, and the jacana. Yet there are left some seventy per cent. of this order which are polygamous, and therefore approaching less to

our ideal of conjugal union. This is the case also with the whole of the gallinaceous order. It is well known how polygamous are fowls and pheasants, peacocks, turkeys, grouse, partridges, quails, and so forth. In all these, the mother has no reason whatever to rely on her mate either for assistance in rearing her brood, or for defence against an enemy.

But from the level of the pigeons upward, the display of conjugal affection among birds is most striking. It is a matter of popular knowledge how devoted are the doves in their wedded life. Each male is mated to a single female; his loving attentions are not confined to the seasons of sexual desire, but continue unabated all the year round. He assists in building the rude nest; he feeds her while she broods; he relieves her at times in her monotonous task, and when the young are hatched the group forms a pretty family picture, the father being as solicitous in all parental cares as is the mother. Darwin tells us that in a large proportion of cases the unions are broken only by the death of one.

The great majority of the higher birds are monogamous, and a very considerable proportion of them form unions that are lifelong. Wherever this occurs we may be sure that upon the fundamental passion of the sexes for each other there has been superimposed a more disinterested feeling of loving sympathy.

Among all the smaller birds of the finch and sparrow types, the male and female pass a happy time together in the days of their nest construction; and in the season of brooding the male pours forth tumultuous floods of tuneful emotion.

> Love gives it energy, love gave it birth.

He assists in feeding the young, and remains the ardent lover till, when summer is past, parents and offspring join the general throng, and the pretty family life is merged in the life of the flock.

There are many hundreds of species of which repeated instances have been recorded to show that a sick bird is nursed and fed by its mate, and that its death is followed by the disconsolate mourning, often by the steady decline and

decease, of the bereaved partner. Gray (p. 292) relates how he noticed a pair of birds always together, and for a year observed the attentiveness of one to the other. He shot them both, and then found that the female, though her lower mandible had long been torn away, so that she was incapable of feeding, was plump and fat. The conclusion he drew was that, for a year and more, the male, like a faithful comrade, had fed her well and assiduously. Bishop Stanley (p. 223) relates a pathetic story of the love of a female sparrow for her mate. In another place he tells of a female wagtail which, through some mistake, had been induced to build her nest and lay her eggs within a brass foundry. The male, afraid of a lathe that worked near by, and the din of hammers, never ventured in, but brought her food for her all the same, leaving it upon the roof, week after week. Absence had here not interfered with affection, the bodily thrill of sexual endearments was no element in his motive, but his zealous labours must have been the outcome of a loving and self-sacrificing devotion.

But this is the normal line of conduct pursued year after year by the hornbill, which, when its mate has laid her eggs in a hollow tree, walls up the entrance with clay in order to exclude the varied pests so common in the Indian and African climates. He leaves a sort of buttery window, through which, with his beak, he passes in her food, and that so assiduously for two or three months that while he is grown thin, she is so fat as to be esteemed by the natives a most dainty dish. (Livingstone, *Miss. Travs.*, p. 613.) Woodward, speaking of the hornbills of the East Indies, says that the male wears himself to a skeleton in feeding his wife and her young one. (*Naturalist among the Headhunters*, p. 84.) Livingstone describes the extreme affection of the mated pair, and relates that, when a male hornbill was shot, the female for five days hovered round with plaintive calls, anxiously striving to persuade her beloved to join her. She ate nothing, and died, as Livingstone supposes, of grief.

The bower birds (*Ptilonorhynchinæ*) show great conjugal attachment, the male building his bower for the gratification of his mate. The gardener bower bird is said by Dr. Beccari

(quoted Romanes, *Animal Intelligence*, p. 325) to make quite a garden in front of the bower, and thither he daily brings moss and buds and brilliant berries as offerings to the mistress of his affections.

Brehm tells of a grosbeak (*Pinicola enucleator*) which voluntarily crept under a net wherein its mate had been captured, braving the dread presence of man in order to be near its unhappy consort. (*Vögel*, i., 315.) But indeed he speaks of the conjugal life of the grosbeaks in general as being marked by much that is self-sacrificing in the highest degree. I remember on one occasion, when I wished to ascertain the weight of a yellow-breasted honeysucker, I caught one of a pair, tied its legs lightly together with cotton, and laid it in a pan of the scales, when it escaped, and at a flash flitted out through an open window, taking refuge in a clump of cypress. At the first chirp its mate joined it, and the solicitude of the little thing at seeing the plight of its consort was most affecting. The shackled bird could escape being caught, yet fluttered rather helplessly from twig to twig. When they were out of reach both pecked industriously at the thread, which eventually became entangled in the outermost twigs of a lofty branch. Here for an hour and a half the prisoner was attended by its mate, which hopped round it, caressed it, encouraged it, often looking wistfully into its eyes, whistling all the time a low and plaintive note. Their painful experiences were ended at length by the disentanglement of the feet from the thread, and off they flew, as happy a pair of lovers as the air ever wafted towards their home.

Brehm gives a picture of the often-noticed agony of a linnet when its mate has been shot (*Vögel*, i., 293), and he asserts that woodpeckers of some species droop and pine away after the death of their consorts. Of the reed titmice, he describes the "extraordinary tenderness" which always leads to the death of the second of a pair if its mate should die or be removed (i., 184).

Audubon believed that the ivory-billed woodpeckers (*Campephilus*) form unions which are lifelong. (*Ornith. Biog.*, i., 345.) Professor Rymer Jones, on the authority of the Prince von Wied (ii., 153), declares that the raven shrikes (*Thamno-*

philus) are so much attached to their mates that each pair continues together in unvaried affection throughout their lives. Brehm, on the authority of his father, who watched them long and carefully, declares that the ravens are united in most devoted couples, "which, once paired, remain together in lifelong fidelity". (*Vögel*, i., 428.) The whole parrot class of birds are said to be monogamous, and to form but the one union for life. As I write, the parakeets (*Platycercus*), in the late autumn, flit past the window as they did in the spring, always in pairs. All the year round one may easily notice how, even when a multitude are plundering the same fruit-tree, each pair is distinguishable from every other, and as this is without the least break in the long interval between the breeding seasons, it is easy to infer that, in the main, their unions are permanent. So it is said to be always possible in a flock of cockatoos to pick out by their mutual attentiveness those which form wedded pairs.

Dr. Franklin's account of the care of a caged parrot for his mate, which was slowly dying of a gouty swelling of the legs, the utter dejection he displayed and yearning solicitude to be of service, his unhappiness after her death, and his subsequent rapid decline, is in itself most touching, and has this great value, that the well-known competency of the observer removes any fear of a sentimental misinterpretation.

Owls, though the love-match is less permanent, show a very tender attachment, which at least outlasts the breeding season. The flycatcher, the babbler, the bulbul, and scores of others, have been often the subject of eulogies founded on their sympathetic conjugal relations. Even the birds of prey, unsocial and rapacious though they be, may claim the credit of being not only careful parents but most affectionate spouses. Almost all of them seem to pair for life; the very vultures, whatever of horror and disgust their habits cause us to associate with their names, form their true love matches, which nothing but death can sever. Brehm says of a Brazilian species (*Polyborus vulgaris*): "The closely united pair live throughout the year in strict companionship, and if a flock of them be seen, the mates can at once be distinguished

by their mutual devotion". (*Vögel*, iii., 412.) So also Audubon says of the white-headed eagle (*Ornith. Biog.*, i., 166): "The mutual attachment which two individuals form when they first pair seems to continue till one of them perishes".

The birds, therefore, as a class are most honourably distinguished by conjugal devotion, and of a large proportion of them the words are literally true which Shelley addresses to the skylark—

> Thou lovest, but ne'er knew love's sad satiety,

for their affection never wearies until life itself be spent.

Conjugal Feeling among the Higher Mammals.

Among the mammals, as we have seen, it is not till we reach the highest species that we have any approximation to this nobler conjugal attachment. Of the prosimians, too little is known to enable us to judge of their character in this respect. The people of Madagascar, according to Brehm (i., 274), assert that the male of the lemur joins his mate in the nurture and defence of their single offspring, and if this be truly the case it supplies the greater of the two advantages of conjugal sympathy. It is likely enough that something of the kind is usual, for it is known to be the habit of their near allies, the marmosets or squirrel-monkeys of South America. Male and female roam the forest with their little one beside them, which remains at all times closest to its mother, but at the slightest cry of pain or danger the father hurries up to join the pair. (Brehm, i., 258; Vogt, i., 71.) Most of the monkey class, however, are polygamous, the strongest male gathering round him quite a group of females. With these his union is perennial, and although the condition is not wholly our ideal, he shows some resolution in the defence of his wives. He never leaves the mother single-handed to suckle, carry, and defend the little one. Of the males, as of the females, the words of Brehm are true (i., 40): "In one

point they are all most distinguished—in their love towards their offspring and in their compassion towards weakness or tender years". The conjugal life of the monkeys is not characterised by that simple, earnest, whole-souled devotion which forms so touching a feature of the higher birds. It has its moods, its whims, its playfulness, which is often provocative and sometimes malicious, yet it stands far higher than that of the lower birds—higher, for instance, than that which we see in the poultry-yard. It is good so far as it goes, and serves the great purpose of uniting the parents in the service of their offspring, though, of course, in polygamous communities the paternal care is a much divided quantity. It will rarely happen, however, that one male will have half a dozen offspring under his care at the same time, and we may easily imagine that if he takes upon himself the duties of scout and guide and guardian, leaving to the females a freer time in their attentions to the young, he serves a useful purpose in the economy of his race.

Yet even these lower monkeys are not always polygamous. Darwin asserts that "some of the Indian and American monkeys are strictly monogamous, and associate all the year round with their wives". (*Descent of Man*, p. 590.) Houzeau is very explicit in his statement that the wanderoo of Ceylon (*Macacus silenus*) "has only one female, and is faithful to her till death". (Quoted Letourneau, *Evolution of Marriage*, p. 33.) It is difficult to say how an observer can be positive in regard to such an assertion, for Brehm states that of the free life of this species practically nothing is known; but as it is often tamed by the Cingalese, who keep the wanderoos in considerable numbers, Houzeau may have reasoned to a just conclusion from observations made on captive specimens. As all monkeys, however, are strongly predisposed to affection, we may without rashness believe that, whether polygamous or not, the sexes are united by sympathies which are tolerably distinct from the sexual passion, and there are many records of cases in which monkeys have died of grief after the loss of a well-loved spouse.

As we pass upward into the family of the anthropoid apes, we find the father taking a still more prominent part in the

care of the offspring, and the tendency to monogamy is undoubted. The lowest genus, the gibbons, though seen as a rule in troops of from six to a hundred, guided by a powerful old male, seem to be united in pairs that live amicably together, the male taking a tender share in the nursing of the young. Hartmann states (*Anthropoid Apes*, p. 254) that the wau-wau (*Hylobates agilis*) "appears more commonly to live in pairs than in troops"; and Lieutenant Crespigny states (*Roy. Geog. Soc. Proceedings*, Jan., 1872) that if this species is found in a small herd, there are generally present a father, a mother, and two or three young ones of various ages. It has already been shown that this is partly true of the orang-outang also, though the males and females of this species more generally live apart, meeting each other on the moonlight nights. (Rajah Brooke's *Journals*, i., 227.) Carl Vogt says (*Mammalia*, i., 34) that the chimpanzee roams in families consisting of father, mother and child, these families sometimes uniting in troops. The father builds a seat of boughs on some high trees, whereon he watches over wife and child, and if they are attacked will use his teeth and arms vigorously in defence of those to which he is so warmly attached.

Of the gorilla, Hartmann thus summarises the scattered accounts of travellers (p. 229): "The gorilla lives in a society consisting of a male, a female, and their young of various ages". But Savage, in his *Description of Troglodytes Gorilla*, speaks of a family as consisting of two or more females with their young, all grouped round a single old male, which, however, is the champion for the defence of all. Du Chaillu seems inconsistent in his two accounts. In his *Ashonga Land* he speaks of groups of several females and their young, without any full-grown male. But in his *Equatorial Africa* (p. 349) he says that he found "almost always one male with one female". The observer had of course to describe what he saw, and perhaps the variations of the season might account for the difference. Koppenfels asserts that the gorilla dwells with wife and children, mounting guard over them at night. He once observed a family at their meal. The father, sad to relate, sat at his ease, while his wife and two children

plucked the berries for him to eat. If they took any great share for themselves he growled or even struck them. He had the ideas of the good old house-father among men.

Conjugal Feeling among Savages.

When we pass into the lower ranks of savage life we find a certain degree of improvement. For of all it may be uniformly asserted that males and females spend their lives together; that their unions are in the main monogamous and comparatively permanent; and that the father and mother are united by the loving care which they bestow upon their offspring. There is but the one exception alleged to the universal applicability of this description in the case of the lower savages. It is very often said that the Andaman Islanders consider the union of the sexes to be terminated by the birth of a child, and that the man and woman thereafter form fresh connections. This statement has passed current on the authority of Sir Edward Belcher, but as he alone, out of the eight writers whose descriptions I have read, reports this circumstance, the others, some of whom lived long on the islands, not so much as referring to it, I suppose it must be taken as a case of some sort of mal-observation, perhaps a hasty generalisation. For as there is neither law nor guiding principle among savages upon that level, their conduct is apt to be loose, their unions will often show much want of stability, and will rarely be of life-long permanence. Thus when tried by our standard their customs shock us, their unions seeming looser perhaps even than the connections so readily made and unmade in the slums of our own great cities; yet they are probably stable in comparison with the sexual attachments formed by any of the lower animals, save only the higher birds.

In the lowest savage life, not the remotest vestige of the idea of chastity is to be found. The gratification of an instinct is simply a natural process that has in it neither good nor evil. The young folks of a tribe, as soon as they reach the age of puberty, satisfy their awakening passions so far as

ever they may; nor is there any hindrance except that which comes from the interference of the older and stronger men, who in due course appropriate the girls to themselves. But in the very lowest savages even this degree of restraint is comparatively inoperative. The young indulge in a promiscuous intercourse which, in its licence and constant gratification, soon loses its early keenness of attraction, and settles down to the level of a routine want.

Even so, among ourselves, the gay young man, after his years of unchaste revel, when all the poetry and beauty of love have been trampled in the mire of riot, seeks in marriage only a quieter, less exciting, less expensive method of securing that gratification which has grown stale at the old price. If not wholly lost to better feeling, he may appreciate the companionship of a wife; he may feel that, after all, the old life was a lonely life, and may find a genuine pleasure in the new charms of a restful household sympathy.

Something of the sort occurs in the lowest savage life, when, after the period of free-love, a mutual inclination makes a special pair gravitate towards each other. This is constantly promoted by the birth of the first child, when the cares of motherhood make the woman less anxious for the vanity of fascinating new lovers; while the man, in most races, drawn by the natural sympathy for infancy and the wiles of baby years, lends himself readily enough to the comfort of a family life. Moreover, there are other motives in action. The man secures a slave and an attendant, while the woman secures a protector, a matter of no little importance in a society wherein is no law, and where the only chance of justice is to be strong enough, or to have a friend strong enough, to take one's part.

There is, however, no abstract appreciation of monogamy. When a man can get a second wife, he never hesitates to take her, unless he finds the family thereby made uncomfortable. He has no great compunction in changing an old wife for a new. On the other hand, if a woman finds two men willing to live in harmony with her, both as husbands, there is not the smallest feeling against the arrangement. If they can manage happily amongst themselves, it is nobody's concern

but their own. Hence polygamy is common enough, polyandry occasional, among savages.

Neither, however, is systematic till a higher grade is reached; they occur as accidental variations in a general condition of monogamy, which is entirely natural. For the numbers of the two sexes being equal, one man could not secure a second wife without depriving another man. Superior strength and courage might enable him to do so, but as the sexual impulse is one of overmastering power in savages, the defrauded man would not settle down tamely to years of unwilling bachelorhood. Restless attempts now on this hand and again on that would disturb the peace of the tribe. The man with more than one wife would have at all times to mount guard over them. He would be less imperiously urged to retain them both than the other man to secure one of them. It is easy, therefore, to see that in a society wherein neither wealth nor distinction of rank could give one man the aid of other men's hands in securing for him a monopoly against the general interests, there could be no great prevalence of polygamy.

The conjugal condition of the lower savages is in advance of that of the apes, but yet is quite comparable with it. The Bushmen are entirely naked. (Barrow, *Travels in South Africa.*) Their women show not the slightest sense of the need of any covering, and their early licence of intercourse has caused some of their visitors to suppose that they had no such institution as marriage. Lichtenstein considers them to be without the faintest idea of the distinction between maid and wife. Yet we learn from later travellers (Chapman, *Travels in South Africa*, i., p. 258) that there is much affection in their unions, which are in general monogamous, though an old man will often cast off his early wife and take a younger one. The Rev. Mr. Casalis says that "they demand from their wives the strictest fidelity, and punish pitilessly any infraction of the conjugal law". (*My Life in Basuto Land*, p. 157.) Galton tells us that the women have no little influence, the husband always consulting his wife in matters of any concern. (*South Africa*, chap. vi.)

In regard to the negrito races, Sir C. B. Flower states

that "they are all monogamous, and reputed to be faithful to the marriage tie" (*Anthrop. Inst.*, xviii., p. 80); and although intercourse of a free character is common among the young folks, yet, according to Earl, the negrito of the Philippines (*Native Races of the Indian Archipelago*, p. 133) "has only one wife, and is faithful in marriage". The rude Semangs of the Malay Archipelago, who rove in absolute nakedness, both men and women, sleeping in nests among the trees, or underneath a breakwind of boughs, are said to have no formal marriage system; a couple whose inclinations are towards one another keep in each other's company. They have no notion of decency, gratifying their sexual impulses without reserve as they arise, before the general gaze. (John Bradley, *Travel and Sport in Burmah, Siam, and the Malay Peninsula*, p. 295.) Yet their unions are understood to be fairly permanent, and they almost always occur between one man and one woman. (Westermarck, *Hist. of Human Marriage*, p. 436.)

The Andaman Islanders, according to Owen (*Trans. Ethno. Soc.*, ii., p. 35), have no sense of any indecency in the open intercourse of the sexes. After attaining the age of puberty, the girls are used for indiscriminate gratification, the only restriction being that fathers must not so approach their daughters. Mouat (*Roy. Geog. Soc.*, 1862, p. 122) gives the same description, stating that after the age of about twelve years, the girls are enjoyed by the tribe in common, till each forms a predilection for some particular man, when a little ceremony unites her exclusively to him. Owen, however, says that there is no rite, nor anything but the simple cohabitation of the pair. Mouat tells us that "the wives are said to be faithful to their husbands," while Owen makes the more careful statement that the wife is expected to have no further amatory intrigues, but to bestow her favours only upon her husband or at his direction. Yet the men take but one wife each, and never marry outside of their own tribe. (E. H. Man, *Journ. Anthrop. Institute*, xii., p. 135.)

The Brazilian and Guiana tribes, according to Bates (*Naturalist on the Amazon*, p. 305), allow the girls to lead a short career of looseness before their marriage, and Dalton (i., 80) says that "chastity is not considered an indispensable

virtue amongst the unmarried women," while Waitz declares (iii., p. 382) that the Caribs "put no value on the chastity of unmarried women". Wallace describes the women as absolutely naked; the marriages are effected without any sort of ceremony, but in general a man has but one wife (*Travels on the Amazon*, chap. xvii.), and she is as a rule faithful to him. The Rev. Mr. Brett (*Indian Tribes of Guiana*, p. 98) gives to the men also a good character for conjugal kindness, saying that they are faithful and attached to their wives. Polygamy is by no means unknown, but it is somewhat rare.

Of the Fuegians, Fitzroy tells us (ii., p. 182) that promiscuous intercourse prevails to some extent. It is clear from all accounts that men and women are absolutely naked, but that they form permanent unions, which are mainly monogamous. Darwin, it is true, alludes in passing to the "universal privilege in this country of possessing two wives" (*Naturalist's Voyage*, p. 277), but this half-jocular expression is not to be too much pressed, for it would imply that females are twice as numerous as males, of which there is small probability.

In regard to the Ainus of Japan, A. H. Savage Landor asserts that "their marriage customs seem to be summed up in unqualified promiscuity, the Ainu disclaiming any idea of being better than bears or dogs". (*Nature*, xlvii., 330.) Yet Batchelor tells us (*The Ainu of Japan*) that the girl at sixteen or seventeen settles on some youth of her choice to be her lifelong mate. No one interferes with the wishes of the young folk, and a marriage feast is always made. Mossman regards the sexes as being faithful to the tie thus formed, husband and wife being very companionable the one to the other. Though there is no law or custom which forbids polygamy, it occurs but rarely. Divorce generally follows, however, if the wife is childless.

The Tasmanians, who as a naked race, without homes, and ignorant of any but the most rudimentary arts, represented humanity on one of its lowest levels, were accustomed to the general promiscuity of young girls before their marriage, which was nothing more than mere appropriation by some particular man. (Bonwick, p. 38.) A widow was the common property of all the young fellows of the tribe until she

remarried (Brough Smythe, *Aborigines of Victoria*, ii., 386); and from the earliest date a Tasmanian was ready to sell the virtue of his wife. (Calder, p. 19.) Yet these people were monogamous; for though Labillardière and others of the early voyagers took it upon them after a brief inspection to state that they were polygamous, those more recent observers who spoke from lengthened experience have been of quite a different opinion. Calder (*Native Tribes of Tasmania*, p. 35) says that polygamy was uncommon, though not unknown, and Bonwick (*Daily Life of the Tasmanians*, p. 71) makes the same assertion.

The Australians, who were a trifle higher in development, almost all indulged in a very general promiscuity alongside of generally monogamous unions. For about six months after their initiation into manhood the youths were allowed an unbounded licence, and there was no possible blame attached to the young unmarried girl who entertained them. Men and women joined in their nakedness to perform lascivious dances, and it was in many tribes a custom during a grand corroboree that a number of women should form a camp a little way off from the dance, to which the unmarried men could retire in the intervals to enjoy their gross embraces. (Brough Smythe, ii., 319.)

Mr. Alfred W. Howitt, a writer whose careful and scientific manner of writing gives to his statements the greatest possible weight, speaks of the same looseness of sexual relations among tribes in the far interior that had never seen or heard of a white man till he visited them. "One custom," he says, "is universal, that strangers visiting a tribe have women given to them as an act of hospitality. I used to find it most troublesome, and I often had great difficulty in making the black fellows understand that we did not want their women." (Brough Smythe, ii., 301.) In a paper in the *Journal of the Anthropological Institute* (xx., p. 57) the same writer more explicitly describes a sort of regulated promiscuity among the Australians. A woman is married to one man, but she has numerous other group-husbands, each called a piraura, and each entitled to marital rights. He describes certain festivals (p. 62) at which one woman is chosen to be

used for the intercourse of every man and lad who is present. The great preservative power of that idea of chastity which is of subsequent development is well seen in this paper. Howitt tells us that in spite of much care taken to obviate all cause of quarrel, it is precisely out of these loose sexual relations that nearly all the feuds arise which so much weaken and reduce the tribes.

In the very earliest days of Victoria a commission was appointed to inquire into the condition of the aboriginals. It printed a schedule of questions, one of which ran thus: "Is chastity cultivated among the women?" Fourteen gentlemen, missionaries, protectors of aborigines, and pastoralists of well-known respectability replied to this question. Twelve of them bluntly answered that the women had no conception of chastity. One stated that within their own tribes the women recognised limitations, and showed some indications of modesty, but that they never refused the solicitations of a white man. The fourteenth, who was well known as a fervid champion of the blacks, being the chief of the staff of protectors, could not go further than the weak assertion that "chastity is to a certain extent cultivated".

In the House of Commons papers for 1844 will be found some 350 printed pages of reports, memoranda, and letters gathered by the standing committee appointed in regard to the treatment of aboriginals in the Australian colonies. All these have the same unlovely tale to tell of an absolute incapacity to form even a rudimentary notion of chastity. One worthy missionary, who had been for some years settled among tribes of New South Wales, as yet brought in contact with no other white men, writes with horror of what he had observed. "The conduct of the females, even young children, is most painful; they are cradled in prostitution and fostered in licentiousness." Brough Smythe (ii., 240) quotes several authorities who record that in Western Australia the women in early youth were almost prostitutes.

Monogamy Prevails in Savage Life.

Yet along with all this licence monogamy prevailed. Curr states that while "individuals might occasionally have two or

even three wives, yet the rule was to have only one". In his more elaborate work (*Australian Race*, ii., 196) the same writer most clearly indicates that polygamy was rare. The Rev. Mr. Schürmann says of the South Australian blacks that "they frequently sent their wives out to other parties, or exchanged them for a night with a friend. As for near relatives, such as brothers, it may almost be said that they have their wives in common". (*Native Tribes of South Australia*, p. 223.) Eyre speaks of "the almost unlimited intercourse between the sexes". In a note wherein the indelicate details are veiled in Latin, he describes conclusive facts on which this sweeping generalisation is based. (*Discoveries*, ii., p. 320.) Woods (*Native Tribes of South Australia*) declares that the young man, up to the age of about five-and-twenty, had to content himself with the gratification arising from any opportunities that occurred for general intercourse. But so soon as he had a sister or any other female relative to offer in exchange it was possible for him to secure a wife. All the writers who contribute to Woods's book consider that the old men had generally two or more wives.

But though man in the rudest savagery has as yet acquired no notion of the virtue of chastity, still, amid the licence of unlimited indulgence there grows the natural propensity to the happiness of the family life; the wife as a helper, a companion, too often a drudge, is a comfort to the life of a man, as well as the mere instrument of his gratification. Then there come with her the children, of whom, in moderation, the savage is extremely fond. Time has the power with all of us to endear the places and persons that grow familiar with long and daily communion; hence in savage life a tie of affection tends to unite the mated pair already kept together by the common love of their offspring. And the more this finer sympathy prevails, the more permanent in consequence become the unions of the sexes; the better therefore is the care bestowed upon the young, and the less is the tribe rent and weakened by those feuds which so often arise out of loose sexual relations.

Among the higher savages we begin to find that the mating of the sexes passes more under the control of something

like customary law. The maiden being a desirable possession, her father becomes aware that he can get something for her. Certainly it is not much, for in a race which neither tills the ground nor domesticates the useful animals, there is little to exchange. At first it is merely woman for woman, but by degrees the parents learn to accept weapons, skins, or other commodities of savage life; at a later date, slaves, or in the barbarian stage, cattle are given in exchange. This is the normal process of development, but it is varied by the constant capture of women where the chances of war may render it possible. Each of these will be examined in detail in the following chapter; it is here necessary to notice only that by degrees men and women no longer merely drift into stable unions as the sequence of promiscuous gratification.

And yet the degrees are very slow. The old animal-like fashion recedes insensibly before the tendency to a system which, though still ignoble, is at least more regular. Taking all the races in order which are on the higher savage level, we find that among the Nagas of the hills of Assam there is "great moral laxity before marriage, but the very opposite after it". (Lieutenant-General Fytche, *Burmah*, i., 349.) The other aboriginal tribes of India which are of the same standard seem, according to the elaborate volumes of Watson and Kaye (*Peoples of India*), to answer to the same description. Among the Santals, for instance, "marriage takes place chiefly in January. For six days all the candidates live in promiscuous concubinage, after which the whole party pair off as man and wife." From that time forward, violation of the marriage fidelity is punished with fines. Among the 18,000,000 aboriginals in India, there are very varying degrees of civilisation, but there are only a fifth of the races in which there is any value set upon the chastity of a girl before her marriage, and these are the races most affected by the admixture of the conquerors' blood or by the infiltration of their ideas. Among the lower races, all those on the level of Todas, Kurumbas, Kotas, and so forth, laxity before marriage and strictness after it seem to be the rule. Polygamy is rare.

For all the American races, as already indicated, the testi-

mony is ample. Bancroft (*Native Races*, i., 65) says that among the Eskimo "modesty does not exist, chastity is little regarded, and a stranger is always provided with a female companion for the night". Richardson (i., 356) found this practice a frequent annoyance. Polygamy is in no way prevented, but is uncommon. Of the Koniagas, Bancroft says (i., 80) that they have no idea of sexual morality, nor is female chastity at all regarded. An unmarried girl lives a life of the most beast-like freedom, but once she has been purchased for the use of one man, she must never wander elsewhere without his permission or command. The usual practice is that when a girl reaches the age of puberty, the shaman or priest first of all debauches her, and after her initiation in his embraces she soon learns to prostitute herself to the tribe until some bridegroom offers to her father due payment for the exclusive possession of her. Polygamy is uncommon; but sometimes a man will purchase a second wife, and yet it is quite as common for two men to club together for the purchase of a single wife.

Among the Creek Indians, as we learn from their friend and admirer Schoolcraft (v., 272), "simple fornication is no crime or reproach; the sexes indulge their propensities with each other promiscuously without secrecy or shame". Lewis and Clarke, speaking of tribes who until their visit had never seen or heard of a white man (*Travels to the Pacific Ocean in* 1804), say that "the Indian women are of an amorous disposition, and before they are married are not the less esteemed for the indulgence of their passions. The young men commonly spend their nights in the tents of the girls, who use an application of herbs to prevent conception" (p. 103). Yet they tell us that the Indian girls after a time form monogamic unions, and while their husbands are little inclined to be jealous, the infidelity of a wife is rare (p. 46).

Mackenzie, however, will not grant them the merit even of conjugal fidelity, for he says that "chastity is not considered among the North American Indians as a virtue, nor is fidelity essential to the happiness of married life". Among the Tinneh, dwelling to the west of Hudson's Bay, Bancroft tells us that the married women are tolerably chaste, but an unmarried girl is the willing partner in every excess till some

young man agrees to serve a year for her in her father's hut, after which she is well behaved. Polygamy is not unknown, but it is rare. Among their neighbours the Thlinkeets, the women are by no means so lewd; and those of the Aleuts are even less given to looseness in their unmarried state. Yet in both races men freely exchange their wives or lend them for a consideration. A wife is always purchased, and a man well enough off to buy two of them will find no obstacle in the usages or ideals of the tribe, although in practice polygamy is a rare custom.

Speaking of the Cherokee Indians, C. C. Jones tells us that "comparatively little virtue was shown by unmarried women. The chances that a girl might marry well were augmented if she had been a general favourite, but had avoided having children, during her years of general pleasure. Adultery in a wife was severely punished; but a man, even though married, never had the remotest notion of self-restraint." (*Antiquities of the Southern Indians*, p. 69.)

It would be tedious to follow the same sort of testimony through all the tribes of North America, for the few are samples of the many. Bancroft in his *Native Races* (vol. i.) says of tribe after tribe, "chastity among unmarried women is unknown; they are allowed the grossest licence". Out of thirty-eight of these aboriginals, I find it expressly recorded in the case of twenty-one, by men who knew them well, that unlicensed sexual intercourse is allowed the unmarried girls, with whom all the men, married or unmarried, have constant intrigues. In all of these the loan of wives to honoured visitors is a usual custom; the exchange of wives, either temporarily or permanently, is very general; and the sale of the use of wives or daughters is too common to excite surprise. Of the remaining seventeen cases, most are excluded because I have found it impossible to obtain express information; but in only four out of the thirty-eight do I find it recorded that a girl was better esteemed when she remained of unspotted purity until her marriage. Among the savage races of Central and South America the record is practically the same.

Yet polygamy is rare. In his smaller work (*The Indian in*

his Wigwam, p. 73) Schoolcraft says "polygamy is found chiefly where food is abundant, but even there it is scarcely reputable". It occasionally happens that a chief has four or five wives, but in general the warriors of the tribe are too nearly on the same level of rank to suffer that one should appropriate five women and leave four men to go without.

There are other reasons why polygamy is uncommon in savage life. Where divorce is easy and exchange of wives usual enough, and unmarried girls held in common, there is no great inducement for a man to purchase many wives. But the chief reason of all is simply the natural tendency of the human race to drift into monogamous union. An affection, sweeter, calmer and more lasting than mere sexual impulse, grows up between husband and wife, and in the natural state, until interfered with by other causes, binds them together in a sympathy which neither tolerates a rival nor seeks to introduce one.

Amusing instances are to be found in the descriptions of life among the Australian tribes, where a wife defies her husband to bring in a younger rival, and keeps a camp embroiled and embittered for weeks by her natural objections. It is true the husband could always knock on the head the wife who interfered with his wishes, and often enough this was the means of ending the trouble, but then polygamy was over. And even savage man is not so much of a beast as to live for years with a woman without acquiring in general some degree of household affection for her. As a rule, the man who proposed to bring in another wife made every effort to placate the old woman and reconcile her to the innovation. He might succeed, but more often the unhappiness of his household would lead him to desist, and he would cultivate peace round his fire, easily finding variety, if he wanted it, without the accompaniment of daily quarrels. Schoolcraft gives a humorous description of the semi-apologetic air with which, among the North American Indians, even a determined chief would bring home a second wife and face the trouble which he knew to be brewing.

Hence it may be said of savages in general, that while there is no moral feeling whatever to regulate the number of

a man's wives, or of a woman's husbands, nor to interfere in any possible way with the gratification of the sexual instinct, yet a natural tendency leads them to drift into the comfort and peace of monogamous union. Moreover the undoubted advantage thus secured in the rearing of children cannot but emphasise this tendency, keeping alive by preference those in whom it is most pronounced. For if 1000 savages now living are the ancestors of a possible 250,000 descendants a century hence, and if of these only 1000 are to survive and replace the original 1000, it is plain that a sympathetic co-operation of both parents extended through many years will have a large influence in settling which is to be the one survivor out of the 250 descendants that were possible.

If I have prolonged the evidence to a somewhat wearisome extent, it is because the conclusion to be drawn is a matter still in dispute. There are still abundance of sentimental people who would gladly look on the savage life as a condition of unsophisticated innocence. They seek for the fabled golden age in the primitive existence, and when the ugly facts here and there are thrust disagreeably under their notice, they accuse the civilised man of having degraded and polluted the simple savage. It is true that the white man places in the power of the dark skins means of self-destruction before unknown to them. It is true that the pioneers of civilisation are too often men whose natures owe little to the culture of their race, and exhibit strongly enough the fundamental animal traits of all races. But it is untrue that in sexual licence the savage has ever anything to learn. In almost every tribe there are pollutions deeper than any I have thought it necessary to mention, and all that the lower fringe of civilised men can do to harm the uncivilised is to stoop to the level of the latter instead of teaching them a better way.

Promiscuity, Succeeded by Monogamous Union, the Early Bent of Mankind.

On the other hand, there are those who take up a position altogether too hostile to the savage. Writers such as J. J.

Bachofen, drawing from the stores of antiquity, and L. H. Morgan, ransacking those of ethnography, and J. F. McLennan, with his powerful sketch from both sources, all maintain that in primitive societies there are no marriages, nothing but promiscuous indulgence. But these have reached an untenable conclusion. For there is no evidence that there ever was a race of men, no matter how void of any idea of chastity, no matter how animal-like their gratification of the sexual feelings, in which men and women did not in the main become to each other partners and companions in monogamic union, and did not to a reasonable extent co-operate in the rearing of their children.

Sir John Lubbock, in his *Origin of Civilisation* (chap. iii.), speaks of the savage practice as that of "communal marriage," every woman in the tribe being, after a manner, wife to every man in it. But this is a clumsy way of describing the fact of sexual looseness in youth, and is in general quite inconsistent with the abundant descriptions which so constantly point to the married woman as faithful to her bond, and permitting the embraces of other men only by permission or direction of her husband.

Everywhere we see evidence that until the growth of moral feeling brings with it a higher ideal, the natural practice of mankind is to begin life with a grossly promiscuous intercourse, but to form in maturer years monogamous unions of fairly sympathetic type. What is the meaning of that army of 700,000 prostitutes to be found in Europe? Does it not signify that a large part of the male population is accustomed to spend its early days in promiscuous intercourse, out of which it passes into marriage? And is not this an indication of that underlying principle of savage life which even the most cultured races of our own time have left behind them after all not more than 100 generations, a time too short for radical modifications of racial instincts?

There are still very many persons who think it only natural for a young man to "sow his wild oats," which in the main is only a euphemism for the grovelling delights of promiscuity. He is supposed to tire, after a time, of this tumultuous indulgence of his passions, and to find some

virtuous girl who will steady him in the quiet satisfaction of home life and the happy cares of paternity. Dr. Parkes, in his *Practical Hygiene*, thinks it not improbable that fully one-half of the "young men of the upper and middle classes" suffer in health by the formation of impure connections. Let us hope that the estimate is very much in excess; though the truth, no doubt, is lamentable enough. Several medical authorities offer the estimate, which, however, is only a guess, founded on the trend of experience, that about one-fourth of the adult male population of Europe is at any given time living in the occasional practice of sexual promiscuity. Certainly when one considers that in the most cultured countries from ten to thirty-five prostitutes exist for every 10,000 of the population, or about an average of one to every 100 men, it must at least be allowed that the most cultured races still are reminiscent of their naked ancestors.

Yet it is a thing hopeful in its way if any considerable proportion of modern civilised men lead virtuous lives from youth upwards, for certainly nothing of the kind on any notable scale ever brightened the records of the past. But by far the most reassuring feature in the consideration of this ungracious subject is the general purity of the women in a cultured society of our own times. They at least are in general far removed from the unlovely experience of savage life.

The sweet purity of the average maiden is one of those blessings for which we have to thank the progress of quite recent centuries. It existed in incomparably less proportion in any bygone age. As Ruskin truly puts the matter: "At no period, so far as I am able to gather by the most careful comparison of existing portraiture, has there ever been a loveliness so variably refined, so modestly and kindly virtuous, so innocently fantastic, and so daintily pure as the present girl-beauty of our British isles". (*Art of England*, p. 197.) If he had included the fresh and virtuous maidenhood of other cultured lands, his words would have been none the less eloquent of truth.

Yet alongside of all this bewitching fragrance of maiden purity, how much is there to suggest that the average civil-

ised man is still, like the savage, fundamentally inclined to a brute-like promiscuity, but that he is rescued from it by a conjugal sympathy which, whether as the romantic devotion of the suitor, or the patient sympathy of the husband, clothes the relations of the sexes in features of sweetness and beauty not absolutely unknown to the savage, but always more marked and more delightful as society progresses.

CHAPTER VIII.

THE IDEAL OF CHASTITY.

The Purchase of Wives.

Though it be true that the idea of chastity as a commendable quality finds its first faint dawning in the middle grade of savage life, it is not at that level an element of any consequence in the motives that influence the daily conduct of the tribe. A woman may have her own reasons for continence, but among these the sense of personal purity has no place. As for men, it is useless to seek for any idea of the obligation or comeliness of chastity till we reach a very much higher standard of development. Among women, however, the feeling of pollution in promiscuous intercourse begins, like a tender plant just showing its leaf-tips above ground, to assert its purifying influence at the stage of the higher savages; but it is chiefly through the stages of barbarian life that the notion develops, growing, as the level of the lower civilisation is reached, more intrinsically cogent, less dependent on self-interest, and touched with something in the nature of a divine enthusiasm, for which a woman would lay down her life. Yet even then it is only in the case of the more exalted souls that aspirations of purity

> Begin to cast a beam on the outward shape,
> The unpolluted temple of the mind.

It is, to my thinking, fairly certain that this change is fundamentally due to the growth of a conjugal sympathy, the woman, in proportion as her true affections begin to cling around one man, feeling less and less inclination for the embraces of others. We see among ourselves that the merry, but good-hearted girl, who in her teens is pleased to have

sweethearts, and flattered by the attentions of crowds of men, no sooner forms a genuine attachment than these delights begin to pall; the devotion of one becomes dearer to her than the admiration of the many. Without feeling it in any way wrong in her to accept the homage of other men if she so pleases, she simply loses taste for them; and the ballroom, to which formerly she impatiently looked forward as the scene of manifold triumphs, is now valued chiefly as it offers opportunities of meeting the one so deeply cherished in her inmost heart. When married, her fidelity to her vows depends far less on her notion of duty or her desire to be pure, than on the indifference to her of all other men compared with him who has her affections. In the great majority of cases the question of unfaithfulness never arises, so completely has conjugal sympathy gained the ascendency over mere animal desire. Custom, public opinion, fear of disgrace and all other accessory motives, have little scope for action in a marriage of genuine and permanent affection, for the caresses of other men are as distasteful to the wife as those of her own chosen among men are soothing and heart-comforting to her.

But this sentiment of conjugal sympathy required long ages for its development, and it was not until it became strong and fairly general that it could give rise to any very distinguishable idea of chastity. The unaided operation of natural selection would inevitably have brought the chaste type sooner or later into predominance. For the chaste woman leaves behind her far more offspring than the unchaste. In Europe, according to Mulhall's figures, 100 average married women have 420 children in all, while 100 prostitutes have only sixty. It is certainly not the case that so very great a disparity would appear between the chaste and the lewd woman in a barbarian race, but many circumstances, which it is scarcely needful here to detail, render it a matter beyond doubt that fertility suffers by promiscuous intercourse. This perhaps would not tend to extinguish a strain if diminished fecundity were accompanied by increased parental care. But the truth is precisely the other way. For the woman whose most active thought is to bewitch the men, and whose home is less dear to her heart than the excitement

of amorous intrigue, will be a less efficient mother than she whose affections are fixed on one husband, and whose ambitions and interests are centred in her family. Thus the chaster type is the one most likely to emerge; and, moreover, it will gather round it an increasing public esteem. The woman who spends her days in faithful union with one man has no share in causing those brawls and unhappinesses which arise out of the smiles of wanton women; when the promiscuous beauty, her good looks gone, is cast aside as an ugly creature, still solicitous of embraces which men rarely bestow on her, save for want of a prettier object, the domesticated wife, assured of her position even in declining years by the bond of conjugal sympathy, has beside her a husband to be her defence and sons to do her honour.

Yet this process of natural selection which takes hold of the chaster type for preference in propagation, has received a great assistance from a circumstance which, though not strong in itself, has had much effect in quickening a change that was in any case inevitable. This was the growing sense of possession which the man felt in regard to his wife.

In a cultured people of our own day, the wife possesses her husband to very much the same degree as the husband possesses his wife. And amongst the lowest of all savages, before much sense of any sort of exclusive possession had arisen, the same must have been to some extent the case. But in the intermediate stages a strong sentiment arises such as Petruchio asserts in reference to Katharine:—

> I will be master of what is mine own;
> She is my goods, my chattel; she is my house,
> My horse, my ox, my ass, my anything;
> And here she stands, touch her whoever dare.

Though the sentiment of chastity has its true foundations in conjugal sympathy alone, its history is intimately blended with that of this powerful auxiliary, which inevitably arose as marriage became a definite institution. For it is to be remembered that among the lower savages what we have been calling marriage is only habitual cohabitation. Undoubtedly where this is permanent and founded on mutual inclination, it forms a genuine marriage, but it has a loose-

ness about it which makes it differ considerably from that solemn obligation which civilised societies have insisted on as a remedy against the disorders arising from sexual complications. Whether this view of civilisation is to be permanent or is only a temporary phase, I shall subsequently discuss, but in this place it is our business rather to review its past than to predict its future, to discover its origin rather than its fate. That origin, there can be no reasonable doubt, is to be found in the growing idea of possession which men acquired in regard to women.

Increase of intelligence brings increase of foresight, which teaches men not to waste or lose the objects of their gratification when for the time being they are satisfied. The animal enjoys in his season the society of the female, but being content he lets her go, unconscious of a recurring season of desire; but man has forethought enough, though satiated now, to remember the future, and the more this capacity of forethought develops, the more will he wish to convert the passing enjoyment of a woman into permanent possession of her. The sentiment of jealousy affects him but little, for always in the lower grades of mankind the husband thinks little of lending, exchanging, or selling the use of his wife. It is purely the increasing desire for possession, the wish to have a thing entirely for his very own. Now the exclusive possession of a wife comes about in two ways, which are popularly known as marriage by purchase and marriage by capture, of which two the former is necessarily by far the more widely spread, and by far the more ordinary.

It begins to show itself in the middle grade of savages, but as their mode of life is incompatible with the acquisition of objects capable of being bartered, they having no riches of any form, the purchase of a wife consists in the exchange of one girl for another; a sister, a daughter, sometimes even a mother, is given in return for a wife. But at the grade of higher savage life, the inadequacy and awkwardness of this system give way before the increase of wealth of various forms. Horses, bows and arrows, canoes, furs and skins begin to form the means of purchase. Often enough, where the suitor on whom the girl has fixed her affection has no

means wherewith to pay for her, there arises that variety of marriage by purchase which is called marriage by servitude. He serves her father as a slave or assistant either for a year or else till the first baby is born. In all these early stages of society the woman thus purchased becomes the property of the man, who then is free to do with her what he pleases, and bequeath her when he dies. Sir George Grey tells us that in Western Australia a son inherits along with his father's other property all his wives. He inherits his brother's wives and children. A widow, if not his own mother, must go to his hut and become his wife within three days of her husband's death. Analogous unseemly customs run through every grade of society up to the lower civilised; all the negro races, for instance, having the same sort of callous view of women.

Among the North American Indians, out of thirty-eight peoples for which I have secured information, there are thirty-two in which the bride is purchased at rates that vary from a few yards of wampum up to fifteen or twenty horses. In three, it is the rule for the suitor to do menial service for his bride during a year. In only three do I find that a wife is not paid for, and these are among the lowest of all, for the purchase of wives is, strange though it seem, an upward step. Very often, as the Rev. Mr. Brett tells us (*Indian Tribes of Guiana*, p. 98), the bargain is made while the girl is only an infant, the husband claiming her and carrying her off so soon as she is eleven or twelve years old. Among these tribes, as among all other savages not on the very lowest level, a woman is always the property of the father, husband, or son, and in every savage race of North and South America, the husband could sell his wife, the son his widowed mother, whensoever it pleased him; if such sales were comparatively rare, it was never because they were thought to be any way wrongful, but merely because human affections assert themselves on the humblest level.

But it is not to be too readily assumed that this arrangement destroys all liberty of choice on the part of the girls. In very many races, the purchase money becomes a sort of fixed tariff, and when a girl and a youth have formed a liking for each other and exchanged their sweetheart vows, he is at

liberty to marry her when he has scraped together for the father the recognised price which is customary. It never happens that a girl is put up to auction, the only case I know in which this is recorded being that passage of Herodotus (Clio, 196) wherein he tells us that among the ancient Babylonians, girls were gathered into one place for sale "and around them stood a crowd of men, and the herald used to sell the best of them one by one, first the most graceful of them all". But savages, as we have seen, are usually very indulgent parents. Laziness, greed, and that pride of authority which is most urgent in rude natures may often interfere; but the more one reads of daily life in savage tribes, the more he is impressed with the feeling that a certain good humour is largely prevalent, and that the girl has very generally the choice of her own destination in marriage. Captain Musters, for instance, tells us that among the Patagonians (p. 186) "marriages are always of inclination. The usual custom is for the bridegroom, after he has secured the consent of the damsel, to send an intimate friend to the parents, offering so many mares, horses, or silver ornaments." Guinnard gives precisely the same information for the Araucanians in his *Three Years' Slavery* (p. 140).

It is clear that such a system will make for chastity in women; certainly not chastity in its higher and nobler ideal, but chastity such as it can be appreciated in savage minds. The man who has thus bought a girl to be his own, will tolerate no more promiscuity save with his permission. The girl who has had her choice, and been paid for by her sweetheart, will feel no longer a free agent, and so it happens that the system of marriage by purchase acts as a strong auxiliary to the ever-growing conjugal sympathy in securing fidelity.

The Capture of Wives.

The other manner in which wives passed into the exclusive possession of their husbands arose out of what is called "marriage by capture". J. F. McLennan taught that this form was the fundamental system of marriage in rude societies, and in common with most who read the fascinating

pages of his *Primitive Marriage*, I used to think he had fairly well substantiated his theory. But when one enters on the labour of independent verification, the case is altered, and I am now absolutely certain that the learned writer greatly exaggerated the extent of what was after all a subordinate variation arising out of the general tendency to steal what one has no means of purchasing. Out of 212 races whose records I have examined for this purpose, I find that the capture or simulated capture of wives exists or existed in only thirty-one. It is a large proportion, one in seven; and yet in none of these races is it stated to be the sole or even the chief method of securing a wife, but only one method along with others; whereas it may safely be said that marriage by purchase is a prevailing system in every race at a certain stage of its development.

Marriage by capture is in fact but an episode in the lives of tribes among whom war, plunder, and rapine are the noblest of exploits. The young man, too poor to buy a wife, may hope by courage and skill in arms to capture one. But just as it is absurd to say that all savage tribes could live on stolen food, or use only stolen weapons, seeing that if all merely stole them, there would be none to procure them, so it is preposterous to say that wives were wholly or mainly secured by capture. It is impossible that tribe A could steal all its wives from tribe B, and that at the same time tribe B could take by force all its wives from tribe A. Nor does it mend matters if we make a chain of tribes. The weaker tribes may lose some of their women, and no doubt always did, but they must have kept the majority of them. Either by removal or extreme watchfulness they must have saved their women or else gone out of existence, for the weaker tribes could in no useful degree have captured their wives from the stronger.

Moreover, if it had been the case that tribe A stole all its wives from tribe B, while tribe B stole its brides in the same way from tribe A, it must have dawned even on the savage mind that they were throwing away much labour, and that each would find less trouble in keeping its own than in stealing those of the other. The practice of exogamy has a wholly

different origin. It arises from two causes: first the custom of exchanging women as a means of cementing peace and treaties of alliance, and second the well-known fact that men are more likely to fall in love with women outside of their own circle than with those inside it. The youth who passes fancy free through years of female cousins and good-looking neighbour girls, among whom he has grown up from infancy, is soon bowled over when he goes from home. Some, it is true, are more apt to fall in love with those with whom they have been familiar in their early years; but the great majority of men are smitten with charms which have all the power of novelty. So we may fancy that the youth who had roved from babyhood upward with a tribe of fifty people, among whom not more than half a dozen would be girls in their youthful bloom, would be apt, when he met with a neighbour tribe, to have a violent attack of amatoriness. The girls he has played with, quarrelled with, joined with in lascivious games will seem to his eyes poor in comparison with the strangers. Quite probably, in savage life, he has had his fill of pleasure with these, but he must buy the stranger girl to be his wife. It is no way surprising then to find that exogamy has often grown up as a regular custom; and if tribes, in the zeal of new-made friendship, many times vowed each to the other the exchange of their girls, we can easily imagine how such conventions might become very rigid and gather round them the strange prescriptive powers of antiquity and superstition.

As for marriage by capture itself, it means merely that in rude societies, during the state of war, women will be stolen just as frequently as other desirable things, and that from time to time, when a successful foray has been made, the youthful warrior may so provide himself. In more advanced stages of society, where the position of wife begins to carry with it some honour, the captured women will be made concubines. Such, in all ages and among all people in their earliest civilisation, has been the cruel prerogative of the warrior. The Mosaic law makes full provision for it. "When thou seest among the captives a beautiful woman, and hast desire unto her, then thou shalt bring her home to thine house, and she shall shave her head and pare her nails; she

shall remain in thine house and bewail her father and her mother a full month; and after that thou shalt go in unto her, and she shall be thy wife." (Deut. xxi. 12.) He who compares with this Deuteronomy xx. 14 and Judges xxi. 16 will perceive that while marriage by capture was in no sense the general system among the Jews, it was an episode of warfare that was abundantly understood and provided for. We read in Numbers xxxi. that when the Israelites defeated the Midianites "the Lord spake unto Moses," saying, among other things, that all the men, all the male children, and all the women who were not maids, were to be slaughtered, but the virgins were to be saved alive and divided among the victorious warriors. Thus were assigned 32,000 hapless girls, of whom thirty-two were handed over to the use of the priests.

But this was the practice in all the warfare of antiquity. In the *Iliad* (ii., 353) Nestor incites the Achæans to valour by reminding them that victory will give to each a Trojan woman to lie by his side. In the first book of the same immortal picture of primitive life, Agamemnon (line 110), in his public speech, refers to the captive maidens as the principal spoils of war. Ulysses had fifty of these trophies of his valour. On his return from wandering he found that twelve of them had been unfaithful during his long absence. He caused a rope to be stretched across the court-yard from pillar to roof, and while it hung slack he fastened to it by a noose round her neck each of the unfortunate women. When the rope was hauled taut they were lifted with their feet off the ground, and there they hung in a row like thrushes or cooing doves caught in snares, while their feet for a little space—not long—quivered convulsively in the air. (*Odyssey*, xxii., 465.) The book then concludes with the praise of the god-like Ulysses.

The Huns, after their successful invasion of China in the third century B.C., demanded a yearly tribute of maidens, and for several generations large bands of hapless girls were sent each year to be the victims of their loathed embraces. The Romans at all times of their history handed over to their soldiers the captive women for their gratification. Cæsar made a regular practice of it, and three centuries later,

when the emperor Claudius defeated the Goths, every soldier received either two or three women as his share of the spoils. In times still later, Christian emperors systematically portioned all the female captives among their lustful legions. The very soldiers of the Cross, fighting for their religion under the holiest of oaths, seized the Saracen and Jewish women of every place they captured to be their paramours; here and there a Godfrey of Bouillon or a Frederic of Suabia, who disdained the practice, was looked upon as a wonder of virtue. But no number of instances of these atrocities of war will prove that marriage by capture was the fundamental system among Jew or Greek, Roman or mediæval Frank. It is true that the Spaniards seized the women of Mexico and Peru. "The young maiden was torn without remorse from the arms of her family to gratify the passion of her brutal conqueror. The sacred houses of the Virgins of the Sun were broken open and violated, and the cavalier swelled his harem with a troop of Indian girls." (Prescott's *Peru*, ii., 247.) Yet it would be most untrue to assert that marriage by capture was a system among the Spaniards. It was simply the warrior's licence; and even now, although the exigencies of modern war will hardly permit that each soldier should drag about with him two or three captive women, the same spirit is far from dead. What else meant those horrid days after the British army had captured Ciudad Rodrigo, or those when, four months later, they glutted their brutal passions with the women of Badajos? McLennan has been carried away by the constant recurrence of these scenes in early history to assert for marriage by capture a much greater predominance than ever it possessed. Even the case of the Australians, on which he lays much stress, is little to the point, for an overwhelming weight of testimony goes to show that marriage was by exchange of women. If two or three young men were without the means of securing wives, they might join in a foray, but the writers best acquainted with the nature of the people declare that those who were already provided with wives would be little likely to face the toil and danger of an expedition in order to assist others in securing partners. Curr (i., 108) and Taplin (p. 10) both expressly

state that the capture of wives took place only upon rare occasions.

And the explanation of the simulated capture which forms a part of so many wedding ceremonies is not to be found in a once universal habit of marriage by capture that had subsequently grown obsolete. It is the festive symbolism of the contrast in the character of the sexes—courage in the man and shyness in the woman. In the wars of savages who have little or no wealth, a successful foray will bring back only two sorts of plunder, the scalps or heads of men and the captive charms of the women. The youth who leads home a damsel as the trophy of his prowess will be as proud of her as another of scalps and heads. A certain lustre will gather round this manner of winning a wife, just as in mediæval times there was no more glorious way of obtaining a bride than by feats of arms. This is a sentiment deeply rooted in all peoples, and Dryden's line has passed into a proverb among ourselves:—

Only the brave deserve the fair.

We may easily conceive how much more dominant would be this feeling among primitive races, and how the nuptials of a warlike youth with a captive maiden would assume the aspect of a military triumph, in whose mimic sports the seizure of the bride would form a prominent feature.

Furthermore, we can easily understand how the supreme glory of being hero on such an occasion might cause the practice to spread to weddings brought about in a much tamer spirit. Just as with ourselves all officers are "gallant," all barristers are "learned," all clergymen are "reverend," as every man is a "gentleman" and every woman a "lady," so might it readily enough come to pass that all bridegrooms would be brave, and their courage be celebrated in the bridal ceremonies.

On the other hand, as the influences we are describing in this chapter slowly produced the feminine ideal of modesty and coyness, there would grow up, as Herbert Spencer very justly observes (*Principles of Sociology*, i., 623), a tendency, sometimes real, sometimes affected, but most often a mixture of both, for the bride to exhibit a reluctance at passing into

the embraces of a man. Archdeacon Moule, as the result of thirty years' intimacy with the Chinese, says that among them an affectation of extreme shyness is the proper attitude of a bride. On the wedding day, if she is at all attentive to appearances, she will stay in bed till late in the afternoon, and then, while expressing her dislike to marriage, she rises under the pretence of compulsion. (*New China and Old*, p. 128.) Bancroft tells us (*Native Races of America*, ii., 251) that among the Aztecs it was always regarded as the proper thing for the bride and her parents to decline the first overtures of marriage, and a modest maid affected extreme reluctance; probably, poor girl, she often felt it when leaving, at the age of fourteen, home and mother and sisters.

It would be useless to quote further instances, though they are abundant, to show that the most admirable pair are the ardent and courageous bridegroom, and the coy, reluctant bride, a state of opinion wholly suited for producing at weddings the conventional fiction of marriage by capture among races wherein the reality often enough occurred, and was held to honour a man so long as he lived.

Obligation to Chastity at first Confined to Women.

The conclusion that marriage by purchase is the normal condition in primitive societies, while marriage by capture is only an episode, will be deepened by the following sketch of the customs of barbarians and civilised races. But as we proceed, it will also be noticed that along with increase in the stability and wealth of the community there arise more stringent views as to the chastity of women, and a greater tendency to polygamy. For the more customary it becomes that a man should pay for his wife, the more jealous will he grow of any interference with the service and devotion his property is to show him. On the other hand, as wealth is never equally distributed, but always tends to concentrate in the hands of those who have strength to win it and brains to keep it, there will arise small bodies of men who are able to purchase several wives. The ideal of chastity which grows up in such a community is not in the least connected with an

appreciation of purity. It is in part the duty of a bought wife to the man who has paid for the exclusive possession of her, and who means to have it; though probably it is in much larger part also the outcome of the strong affections that spring from household intercourse and marital relations. On the man's part there is no obligation, he has not been bought, he is an absolutely free agent. So long as he does not injure other men by intruding upon their property, chastity has no claims upon him. Among unmarried girls or with captive women there need be no limit to his indulgence. When Judah found his daughter-in-law, Tamar, disguised as a harlot by the wayside, he paid her a price and enjoyed her. (Gen. xxxviii. 24.) Three months later when her unchastity became known he said, "Bring her forth and let her be burnt". When the mystery was cleared up, he magnanimously suffered her to live and forgave her the trespass for various reasons, but there is no sort of hint that he had himself done wrong. Nor does he suffer any diminution of repute. In his father's subsequent blessing, he is "Judah whom thy brethren shall praise" (Gen. xlix. 8), and his was the most honoured of all the tribes. Samson was no way disgraced by his wanton loves (Jud. xvi.), and in those chapters of the Proverbs which warn men against the enticements of loose women, though the tone is higher, the teaching is that of a certain worldly wisdom with no flavour of enthusiasm for a pure ideal. And indeed the life of its author, with his 700 "princesses" and his 300 concubines in addition to his queen, would indicate that in the opinion of the wise men of old, though the model woman will be very chary of her person, the model man is one after Mahomet's conception, capable of begetting the utmost possible number of progeny, and of extraordinary strength in sexual intercourse.

And yet, even in barbarian races, though men acknowledged no obligation whatsoever to be chaste, there must always have been a certain tendency for conjugal sympathy to induce the virtue of chastity. A man who has a wife and has grown fond of her, more especially if she is the mother of children to whom he is much attached, will be led by his affection to at least some degree of fidelity to her. How can

he please her with his caresses and protestations of love if he is accustomed to share his endearments with other women; or how enjoy the quiet happiness of family life with his children round about him if he is addicted to the excitements and rivalries of amorous intrigues! There is a certainty, therefore, that the development of sympathetic susceptibilities within the human frame, in ways to be subsequently discussed, will tend to the slow growth of male chastity as the outcome of kindliness and consideration. If there were any chance that this might be a type less calculated to be successful than the average in propagating itself, its influence would have been slight and evanescent. But the truth is quite the other way. The man who is good to his wife and considerate of her feelings is likely also to be good to his children; the family will therefore be favourable for the successful rearing of offspring; and considering how largely brawls and feuds spring out of loose amours, it may be said with justice that the man himself will live longer on the average if he is fairly constant to his household affections.

Wife Purchase among Barbarians.

But the operation of all these processes is slow, and in the consideration of the lower barbarian races, we shall still find the prevalence of much promiscuity and little notion of male chastity, although with the purchase of wives there arises steadily the idea of female obligations to chastity. Of all the North American Indians, the Iroquois were the best entitled to rank on this level. L. H. Morgan (*Ancient Society*, p. 410) tells us that among them chastity was demanded of the wife, or even of the girl who hoped to be well married. The marriage relation, though arranged by the parents of the bride and bridegroom, lasted only so long as the wedded pair were content with each other. Presents, however, were always made by the bridegroom or his parents to the parents of the bride. Among the Hurons, who, of the American Indians, stood next to the Iroquois, purchase of wives prevailed, and the fidelity of wives was expected, save on one night of the year when a licentious festival permitted a general promiscuity.

Of the Thlinkeets, on the west coast of Canada, who stand third on the list, and are the only others up to the barbarian level, Bancroft tells us (*Nat. Races*, i., 107) that the women were more chaste on the whole than the average of the North American races. Monogamy was almost universal, wives were bought, yet they contrived to secure great influence (p. 112).

The Central American races were on the lower barbarian level; Bancroft tells us (i., 763) that the usual price for a wife was a cow. After being purchased the woman was supposed to be faithful to her owner, but wives were often exchanged. The prostitution of unmarried girls was regarded as in no way objectionable, and there were several festivals in the year when lascivious intercourse was general. A man might buy as many wives as he pleased, but he was almost always content with one, who, if he died, became the common property of his male relatives. Of the Mosquito Indians, Bell says that the idea of chastity was quite unknown, but after a husband had bought his wife, he would beat her severely if she proved unfaithful. Though perfectly free to buy as many wives as they pleased, they rarely had more than one each. (*Roy. Geog. Soc.*, 1862, p. 251.)

In a recent most careful work (Codrington, *The Melanesians*, p. 23), we are told that "there is no place in which the common opinion of the Melanesians approves of the intercourse of unmarried youths and girls as a good thing in itself, though it is allowed as a thing to be expected and understood. The feeling that the intercourse of the sexes is innocent is shown by the native hospitality which provides a guest with a temporary wife. At their feasts great and promiscuous licence prevailed, but it was understood to be a disorderly indulgence not quite approved of." In New Britain, we are told by the Rev. B. Danks (*Anthrop. Inst.*, xviii., 292), the marriage tie is a money tie, the husband buying an exclusive right to intercourse with a woman whom he may spear if he finds her encouraging any infringement of that right. A husband can always sell his wife to another, but, if he die, his widow becomes the common property of all the men of the tribe. Analogous information is given by various writers for the

peoples of New Caledonia, the New Hebrides, and the Solomon islands. The general price for a wife would be about three pigs, a few ear-rings, and a stone axe, or their equivalent. (B. H. Thomson, *Roy. Geog. Soc.*, 1889, p. 527.) Wilfrid Powell states that in New Britain girls are often sold while still mere children, and relates a case in which a child-wife of ten years old cried so much to return to her family that her irritated owner killed her and ate her, the tribe assisting in the feast. (*Wanderings in a Wild Country.*)

The Maoris, being thoroughly well known, may be taken as a fairly typical specimen of life in the lower barbarian grade. William Gisborne, formerly a minister of the Crown in New Zealand, tells us, as a result of long acquaintance, that "chastity in single women was held of little account, but infidelity of wives subjected the offenders to death". (*The Colony of New Zealand*, p. 27.) The Rev. Richard Taylor asserts that "prostitution was not viewed as any discredit to the unmarried female, on the contrary it was considered a part of a host's duty to offer his guests temporary partners who were called Waiaipo. Girls were at perfect liberty to act as they pleased until married, when they became Tapu to their husbands." (*New Zealand and its Inhabitants*, p. 33.) Thomson says "girls not betrothed in childhood were allowed on growing up to bestow their favours on whom they pleased. In concubinage the men steal to the women's huts, whereas in marriage they take the women to their own. While maidens enjoy far more than European freedom, married women suffer from Asiatic restraint. When well treated, infidelity is rare, but in the reverse case virtue is far from common. The wives of a deceased father became the property of his son, and those of a dead brother were bequeathed to surviving brothers." (*Story of New Zealand*, i., 178.) Yet I find no reference in good authorities to the purchase of wives among the Maoris. Duperrey (quoted Letourneau, *Evolution of Marriage*, p. 113) asserts that "in New Zealand the man bought the girl". But according to writers who were best acquainted with the Maoris, though a present from the bridegroom to the parents of the bride was sometimes made, it seems to have been voluntary and only occasional. Polygamy was universal

among the chiefs, but naturally rare among the tribesmen.

As we pass upward through the barbarian stage, we find a steady development in regard to the idea of nudity. When we reach the level of the lower barbarians it has become uniformly the rule for women, or at least married women, to cover their bodies. Yet the sense of modesty is still so incomplete that they readily enough lay aside their garment and probably feel no more in regard to the want of it than among ourselves a lady would feel in going out without gloves or in passing down a street without hat or bonnet. The lowest savages possess no clothing; the middle savages possess it but generally go without it, men and women being equally nude; the higher savages generally wear their clothing, which is always ample, but they have never the smallest scruples in laying it aside, and nudity never appeals to them with any sense of indecency. On the lower barbarian level, little more than the same can be said of tribes that live in the tropics, some indeed being more usually naked than clad, although with scarce an exception married women are clothed and a little reluctant to appear publicly in entire nakedness. The middle barbarians also are of unequal development in this respect, many of the negro races being absolutely nude. Livingstone was received by the queen of the Balonda in the full state of a formal reception, yet she was completely naked; all the Polynesian races of this level wear a little clothing, but lay it aside readily enough. An American who lived long in the Marquesas Islands used to enjoy his morning dip in company with a crowd of girls who joined him without ceremony and stripped for the bath. Even the Maoris, whose colder climate encouraged them to clothe abundantly, saw nothing to be condemned, when the girls in public removed their garments in order to swim. The men always stripped naked for work or for fighting.

When we reach the level of the upper barbarians, we find that in very nearly every case the men are displeased if their women appear without clothing, and the women indicate some sense of shame in nakedness. But great differences prevail within even the same race. Thus in Homer we find that the

Greeks of heroic times must have regarded nakedness as being shameful, for Ulysses threatens to strip Thersites of the mantle and tunic which covered his shameful parts (ii., 262), and yet long centuries afterwards the girls of Sparta, up to the age of twenty, carried on their exercises in public in complete nakedness. (Duruy, *Hist. of Greece*, p. 462.) In spite, however, of exceptions, which frequently enough crop up on both sides, it may be said that decency in this regard is unknown to the savage; that it is fostered in the barbarian level; that it becomes tolerably fixed, though with vagaries of its own, in civilised life, but that it reaches only in cultured communities the position of being legally and socially compulsory. Yet in some respects our ballrooms and theatres suggest that even we have not yet altogether reached finality. Probably enough it is not attainable.

There is no doubt that on the whole the middle barbarians show some advance in regard to decency and the sense of chastity, though it would be vain to seek among them for any exalted ideals. Lichtenstein says of the Kaffir women that they are not only decently clad, but that he noticed how carefully they avoided any unseemly exposure while suckling their children. He thinks the married women tolerably virtuous, but those not yet married are never in the least condemned however unchaste may be their conduct. A stranger always finds the girls ready to offer themselves, and they are glad to be assigned as temporary partners to distinguished visitors (i., 264). Holden tells us in his *Kaffir Races* (p. 189) that when a female child is born she is looked upon as a regular piece of property, and is sold for the highest price attainable between her seventh and fourteenth years; her wishes being sometimes but not often consulted. After living among these people for twenty-seven years, this missionary, a warm friend of theirs, declares that "a really pure girl is unknown among them". At all weddings and other feasts the sexual relations break into complete promiscuity. A wild dance lasts till midnight, after which the couples pair off indiscriminately to pass the night together. He describes (p. 198) what he calls "wholesale debauchery," and says that the loan or exchange of wives is common. When men are out

on a journey and come to a kraal to spend the night, they regard themselves as inhospitably treated unless they receive not only food and beds but also female companions. This severe account is corroborated by the testimony of two other missionaries, Warner and Dugmore, who also lived long with the Kaffirs. These people would seem to be the most decidedly polygamous in the world, statistics showing that of 253 men, only fifty-two were content with one wife, while 201 others had 600 wives among them. A discrepancy, however, must prevail somewhere, as the census returns show that there were 17,395 men to 18,062 women. Shaw (*South-Eastern Africa*, p. 420) tells us that if the weather is in any way warm, the men go absolutely naked, but in general a band is worn round the waist of the women which they are loth to remove.

Without going into wearisome details of the many and varied races of the negro type, we may say that while some, such as the Shillooks, are quite naked, in most of them, at least the married women are clothed, and a majority consider some little amount of covering to be a matter of decency. Some are outrageously indecent, while there are others that wear their petticoats of plaited grass or of skins in the hottest weather, and bathe scrupulously apart. Of sixty-one negro races for which I have gathered information, fifty-seven are recorded to purchase their wives; there are four in which it is expressly stated that the bridegroom's presents are always met by an equal or larger present made by the bride's parents, an early indication of what we shall subsequently have to consider, the rise of the practice of dowry. In nine out of these races, the bride is expected to be a virgin when she is purchased, and in a tenth that this will be the case is ensured by the cruel degradation of the process of infantile infibulation. In twenty of the sixty-one races, the girls are allowed the most absolute licence, and a widow has the same ignoble freedom; but in almost every case it is recorded that the married women are allowed no irregular intercourse, save at the command of their husbands. Yet this must be from a feeling of property, for Mrs. French Sheldon (*Anthrop. Inst.*, xxi., 360) states from her own observation that all along the east coast of Africa negresses are allowed the utmost licence

of intercourse before marriage, and no sort of shame ever attaches to it. She tells us that among almost every tribe the bridegroom has four groomsmen at his wedding, each of whom is entitled to satisfy himself with the bride on the wedding night. So gross and animal-like is the moral condition from which men have had to rise! When customs such as these are universal, it is useless to talk of ideals. The truth is that at this level the notion of chastity is only beginning to grow, by reason, in part, of the proprietary right which the husband has in his wife's person. The price he pays varies from one to sixty cattle; the average for thirteen negro races, as to whom explicit numbers are given, is as high as nineteen cattle. Some pay in slaves, some in ivory, some even in gold, but the price ranges from the value of ten shillings to that of thirty pounds. This comparatively high rate and the consequent care with which the husband guards his precious acquisition assist very much in enforcing the chastity of married women. The purchase of wives among the negroes, as everywhere else, tends to systematise the practice of polygamy. The youth has to go without a wife, while the rich old men, especially the chiefs, purchase half a dozen each. Of the sixty-one races, fifty-six are polygamous, four are in the main monogamous, only a very few chiefs having a second wife, and one is strictly monogamous. But in almost all cases the first wife is distinctly the mistress of the household.

Wife Purchase Renders Marriage more Stable.

It is at this stage of development that we find marriages tend to grow indissoluble, as a consequence of the purchase of wives. In a savage race there is nothing to keep the married pair together save conjugal affection. If a husband is tired of his wife, off she must pack. But at the middle barbarian stage the high price given for a wife has a great tendency to steady the fickle husband. In almost every case he is free to send her away if he likes, but, if he has no just cause for doing so, he loses the whole of the money which he has paid to her relatives. A man's affection for his wife may

be somewhat cooled, but when he thinks of his twenty cows, and how long it may be before he will be able to gather another lot, he perceives that he must keep the wife he has, or else go without. Hence the stability of unions is increased.

On the other hand, if the wife wishes to leave her husband, and he is content that they should part, he demands the return of the price he paid for her. She has therefore to persuade her relatives to disgorge the property they have absorbed as their own, in general an unlikely story. Moreover, the consequences of unfaithfulness on the part of the wife begin to alter. In the lower races, where the woman is none the less the man's property though not bought with a price, if she rouses her master to intolerable dislike, he kills her. The same custom is found in some barbarian races, but in most there occurs a change. Why should he lose good property? To kill a bad wife is to throw away twenty good cows. He knows a better way. He complains of her conduct. And if the tribe agrees with him that he has been deluded into a bad bargain he gives back the woman, while the relatives are made to return her price. This must be a most uncongenial necessity, and therefore the father, the brothers, and other male relatives of the bride have a strong interest in keeping an eye on her conduct, and hedging her in to the right path. Chastity then tends to grow a duty, prompted not only by conjugal affection and the fear of marital blows, but also by the prospect of reproach and condemnation from the wife's own people. Thus by encouraging a greater stability of union, and consequent better treatment for the children, the system of purchasing wives has, in its own period, played a great part in assisting the course of civilisation.

It must be remembered, however, that these are only general tendencies, and they are often interfered with by racial peculiarities. Thus the Papuan and the Polynesian barbarians, though living in proximity under similar circumstances, are widely different in their conjugal usages. All the Papuans buy their wives, but among the Polynesians the practice is little known. The Fijians, who are the highest types of the Papuan variety, always purchased their wives.

All girls were the property of the chiefs, who made a good revenue by selling them to the amorous bachelors. The husband, however, had no redress if his bargain failed to please him, except that he might resell her, at a reduced price, if he could find a purchaser. Erskine tells us (*West Pacific*, p. 254) that there was no restriction to the number of wives. A man might buy as many as he could afford, but there was always one who held the highest and dearest position, one to whom the others were subordinate. He states that the intercourse of the sexes was conducted with great delicacy. Prostitution of unmarried girls was far from unknown, but adultery in a married woman meant death. No one went entirely naked in public, all women wearing a petticoat of neatly-plaited bark, commencing with a gaily-dyed belt round the waist, and ending with a decorated fringe at the knees. Erskine considers the women to have been decidedly modest, and that, for a barbarous race, the standard of female virtue was high.

Yet among the Polynesians most of these things were reversed. We have seen that the Maoris did not purchase their wives, nor does Ellis in all his minute account of marriage in Tahiti (*Polynesian Researches*, vol. i.) include the least mention of the practice, though he says (p. 270) "the suitor often made presents to the girl's parents to gain their consent". Among all the Polynesian races I find not a single reference to the practice of purchasing wives. It is perhaps in some measure as a consequence of this want of the purchase system that the marriage tie was very loose among them all. The Tahitians, the highest type of the race, are said by Ellis to have dissolved the marriage tie with great readiness if either husband or wife desired to separate (i., 256). Licentiousness prevailed among the girls, though it is clear that some value was placed on the chastity of a bride, for any girl, betrothed while yet too young for marriage, was forced to remain upon a platform in her father's house, whereon she spent almost her whole time, fed and watched by the rest of the family, to ensure that she should remain uncontaminated. Moreover, there seems to have been a considerable body of the Tahitian people, especially the quiet farming population,

wherein domestic life of a respectable and orderly character prevailed. The chiefs and the warriors allowed themselves an atrocious licence. A society called the Areois consisted of men and women banded together under oath to kill their offspring and mingle in sports which terminated in unrestricted indulgence of the passions. Yet there is reason to believe that this was in a small way like the court immorality of the reign of Charles II. in England, known to us as a time of debauchery and cynic disdain of every sense of decency, even though there then existed a great body of Puritanic simplicity. So in Tahiti, Hawaii, and the Marquesas Islands, the evidence seems to point to the growth of a considerable body of the people whose lives were a silent protest against the customs prevailing among the gayer population.

Moreover, amid all their licentiousness there was at least a certain deference to some sense of decency which was a solid stage of progress in comparison with the rude animalism of the savage. Not only were they well and even elegantly clad, but they were far removed from that brutal condition in which the sexual passions are commonly enough indulged in the public gaze. It is much even when a veil of decency is drawn over indecency, for it indicates an incipient notion of virtue. Turner says of the Samoans (p. 184) that "chastity is ostensibly cultivated by both sexes, but it is more a name than a reality". The same may very justly be said of the Polynesian races in general. For exactly as Turner describes the real profligacy of manners in Samoa, the obscene conversation that passed current in their daily lives, the prevalence of adultery, and the scandalous scenes of their night dances and wedding festivities, and yet praises the neat dresses of the women and the outward propriety of manners that prevailed, so in the barbarian stage in general a real advancement is attained when some regard begins to be shown to appearances. However amorous the graceful women of the South Seas, they had, if not a moral, yet an æsthetic sense, which threw a veil, even if sometimes only a coquettish one, over conduct and desires which were beginning to look ugly, though by no means abandoned.

Female Chastity among the Higher Barbarians.

This description applies with special force to the Malays and Malagasy who stand the topmost of all upper barbarians and just on the fringe of the lower civilisation. Speaking of the people of Timor-Laut, H. O. Forbes, a most reliable authority, states that "the people are sensuous, though no immorality comes to the public gaze". (*Naturalist's Wanderings in the Eastern Archipelago*, p. 315.) In Sumatra, he tells us that efforts have been made to suppress the custom of buying wives, but it is too deeply rooted in the native mind to be overcome. Payment is always made, the goods that are given generally ranging in value from £50 to £200. Yet it does not follow that the father callously parts with his daughter as he might with a bullock. The young folk have their little love affair, but the suitor knows that when he goes to seek the paternal consent he must take or promise the price customary in the rank of the bride. If he cannot pay the price required, and yet the father is willing to indulge the fancy of his daughter, the amorous swain must work for her father until the equivalent of the price is rendered. "A man may buy as many wives as he pleases, but as the necessary payment is high, most men have to be contented with only one." In Buru, as the same author tells us (p. 404), girls are often sold while only infants. A wealthy man may have several wives, all of them mere girls. If a young man cannot scrape together enough to pay for a wife, he sometimes joins with two or three of his male relatives, and they buy a girl among them, she living as concubine to them all, until one can buy the others out and secure the undivided possession of her. If a husband dies, the widow is sold, and if she is too old to attract a purchaser, she becomes slave and concubine to all of her husband's male relatives who choose to share her.

But with all these low ideals there is a strong though mercenary appreciation of female chastity. "There is always much ceremonial at marriage; an illegitimate child is a great disgrace to a girl, and diligent search is made to find the father." (Forbes, p. 197.) No wonder, when the girl's parents are in hopes that her charms, if not too easily enjoyed, will

secure them a handsome price. Forbes tells us that, among some of the Malay races of Sumatra, a girl found to be illicitly with child is sent out into the woods; when she returns it must be without any infant, and the village is purified with sacrifices (p. 182). Sir Stamford Raffles says of the Malays of Java (vol. i., p. 71): "Although no strictness of principle nor strong sense of moral restraint prevails in the intercourse of the sexes, prostitution is not common except in the capitals. An unmarried man over twenty is scarcely ever met, and an old maid is a curiosity. Polygamy is rare, and useless where divorce is so easy and so common." Marsden gives the Sumatrans high praise for modesty and chastity, arising, however, less from any high ideals than from the sense of property. which the father has in his daughter and the husband in his wife.

The Rev. W. Ellis states (*Hist. of Madagascar*, p. 170) that wives among the Malagasy were bought, but Little on the contrary asserts that the bride brought with her a dowry to her husband (*Madagascar*, p. 63), and that if he divorced her he had to hand back the dowry. Sibree, the third of the three best authorities on Madagascar, seems to agree with this latter view, for he states that in the ceremony of divorce the husband must hand the wife a coin as a token of the return of the dowry he had received with her. Equally inconsistent are the records of their moral condition. Ellis is most sweepingly severe (p. 137.) "Sensuality is universal and gross though generally concealed. Continence is not supposed to exist in either sex before marriage. Its absence is no vice, and immorality prevails from youth upwards. On the birth of the late king's daughter" (written in 1838) "the whole capital was given up to promiscuous debauchery." Other writers, however, are less condemnatory, perhaps because vice was kept too much in the background for them to see. Little says scarcely anything about their sexual relations, but he tells us that the Malagasy were reserved, courteous, exceedingly well-behaved, and temperate in their habits. "The woman is always regarded as the helpmate of the man, and she receives much honour and attention; she is not scorned as essentially inferior to man, but enters into her husband's

cares and joys. Divorce is much too frequent, and is too freely granted upon any pretext almost." (*Madagascar*, p. 63.) It would fairly summarise the best accounts if we say that while unchastity in the women of Madagascar incurs no great obloquy, yet they are always gracefully clad in a single under garment with a long flowing robe over it; that they are gracious in manner and by no means immodest in public demeanour. Perhaps a general veil of elegance and decorum conceals no little amount of sensuous indulgence, and immodesty is rather a breach of good manners than an infraction of any moral law, a position which on the whole amounts to the highest standard attained by any barbarian race. Yet it is to be noticed that when a breach of good manners is apt to lead to bloodshed or to bitter quarrels, it is natural among all men to attach to it a very considerable importance, and as sexual irregularities are more productive of domestic disquiet, of deadly brawls, and restless feuds than any other cause, it must often have been considered that though immodesty was in itself harmless, it sowed a deadly crop for subsequent reaping. Thus the woman whose conduct caused death and disorder would have little praise from her neighbours; and if she were at all of a sympathetic nature, small satisfaction in herself. We see how these feelings would act among a people so gentle in their manners as those of Madagascar when we consider their habits in regard to polygamy. It was allowed; no moral sentiment in the least condemned it, yet it was uncommon (Little, p. 65), because, as Ellis tells us (p. 172), it was the source of so much domestic discord, the first wife generally objecting to a second, and as divorces were easily procured, she usually preferred to withdraw, rather than submit to the presence of a rival.

Niemojowski, in his *Siberian Pictures* (i., 161), speaks of the licentious manners of girls among many of the Tatar races. They are without restraint in their early years, but after they have been purchased by a bridegroom it becomes the interest both of the father, who has received the price, and of the husband, who has paid it, to insist that her conduct should be seemly, and thus the lives of married women are fairly virtuous. Among the Touareg Arabs of the Sahara,

another race on the upper barbarian level, the father is entitled to make a profit out of the sale of his daughter's virtue, and no one thinks any the less of him or of her on that account. Analogous reports are made of the Moorish tribes which inhabit the hilly regions of North-west Morocco. (*Roy. Geog. Soc.*, 1889, p. 490.)

Polyandry.

The practice of polyandry, that system in which a woman is married to two or more husbands, is altogether inconsistent with our ideals of chastity. Yet it occurs here and there in all grades of savage and barbarian life, and penetrates more or less distinctly into some parts of the lower civilisation. But the region of its chief prevalence is in barbarism, as those will find who are curious upon the subject by the examination of McLennan's lists. (*Studies in Ancient History*, p. 97, *et postea.*) It is a system which we would naturally expect to find arising where the promiscuity of early life began to yield before the sense of property when purchase of wives became common. The girl who yielded herself up to any of the men of the village just as inclination suggested without the least sense of shame or impropriety, would be conscious of nothing unnatural if two or three of her sweethearts clubbed together to raise the price which no one of them alone could command. Hence it arises that among some 30,000,000 of existing races, people of ordinary lives, and, according to their own standard, staid and respectable character, the custom goes unnoticed when several men, very generally brothers, purchase a wife between them.

But such a system will be general only when the pressure of poverty impels it; for we can easily see the difficulty of maintaining peaceful relations in these households. Polyandry is much more disruptive in its tendency than polygyny. Yet Urquhart, in his *Spirit of the East* (ii., 415), tells us that in Moslem countries the permission of polygyny is not made use of by more than one husband in twenty, for, apart from the question of expense, it is found that the domestic unquiet arising out of it forms a considerable deterrent.

Whence it has come that a mild public censure attaches to the man who is foolish enough to disturb his own daily life, and to strain the relations of several families by taking more than one wife. Lane, in his *Arab Society in the Middle Ages*, corroborates this view. Thus, even in the East, only a small proportion of the wealthy make use of the liberty they possess.

Now it is true that in polyandry there is absent one great source of disquiet, the jealousies that arise out of several families of children who have different mothers; for when each mother is fighting for her own, watchful of every advantage given to the others, when mutual criticisms and insinuations keep the household in perpetual jars, there must be a diminution of daily happiness. Where there is but one wife there can be but one family of children, and these troubles are avoided. But then there is the counterbalancing fact that, where several wives exist, the husband has the strength to keep them in some appearance of good order. They scarcely dare to quarrel and fight in his presence. But where there are several husbands to one woman, their disputes, if they arise, are likely enough to be fierce and disastrous. Though not so frequent, they are certain to be much more disruptive. It is natural, therefore, for the reader to share the surprise of the traveller who occasionally finds domestic peace habitual in a family so constituted. For he recognises in himself deeply-seated human instincts that rebel against the idea of such a system. These bid the husband cling to the wife he professes to love, and to her alone; these bid the wife devote her whole soul to the man who has won her life's affections; to her all others, as we feel, ought then to grow indifferent. And if we ask why it should be so, we shall find, first, the fundamental cause already given, that in the union of one man with one woman the children have the best chances to be well and lovingly reared; and, secondly, as we shall see in subsequent chapters, out of the conjugal sympathy thus engendered, there has arisen the idea of chastity as of something personally pure and beautiful, such as the more refined among modern cultured societies now regard it.

Meantime comparative ethnology teaches us with sorrowful iteration that no such ideal is natural to man in his primitive condition, but that it is the result of scores of centuries of elimination. The same lesson is taught in the history of all the civilised peoples of to-day whose records give any faithful picture of their habits in the times of their primitive barbarism. The early Chinese chronicles, however fabulous in many ways, are in this respect altogether consistent with what we have already learned, for they say that in archaic times the intercourse of the sexes was quite promiscuous, so that men knew who were their mothers, but not who were their fathers. Somewhere about 3400 B.C. marriage became a settled custom with the sanction of orderly laws, the unions being at first monogamic till the Emperor Te Kuh, in 2400 B.C., married four wives, and gave to the wealthy the evil example of polygamy. By degrees, however, marriage by purchase became more and more settled, and polygamy more and more the custom of the great, even though it often led to revolutions and hastened the fall of dynasties. (Thornton, *Hist. of China*, i., 29.) The chronicles of other peoples, though unreliable as records, indicate that this seemed to the early philosophers the natural development of marriage.

Female Chastity in Greece.

We may with little rashness assert the same general course of events among the early Hellenic races. Their records scarcely penetrate far enough into barbarism to throw much light on their earliest condition, but the promiscuity of their mythology seems with no uncertainty to suggest a time when a general sexual intercourse was never in the least degree condemned. Nevertheless, the appearance of such goddesses as Artemis and Athena, honoured for leading virgin lives of perfect purity, suggests that when we first make definite acquaintance with the Greek race, it had reached the stage at which, though virtue in general had little value, the virtue of a woman of good position was carefully guarded. In all the Greek mythology

there is I think no example of male virtue, and the extreme honour bestowed upon the virgin goddesses for a constancy to their ideal which is now shown by millions of unmarried women in Europe and America suggests that, though the ideal was formed, the practice was uncommon. We know that in comparatively early times the Greeks began to secure the chastity of their women by secluding them. For it was their custom to buy their wives, and in that case it requires only a very slight development of the appreciation of chastity for fathers and husbands to find in their own selfish interests an incentive for securing by compulsion the purity of the women. In heroic Greece, as Duruy tells us (*Hist. of Greece*, i., 297), wives were always purchased, and the reader of Homer will remember how often the praise of a beautiful maiden is summed up in an adjective which indicates that she brings her father many oxen. Aristotle asserts that the early Greeks used to "buy their wives of each other". How callous was the system of selling women may be seen in the *Odyssey* (i., 290), where we discover that Penelope, though married half a life-time, and with a grown-up family, is still, if a widow, at the disposal of her son, Telemachus, and further on (ii., 54) we find that her father, Icarius, still has a claim to receive bride gifts if his widowed daughter should be sold in a second marriage. But customs had so far progressed that the mere sale was not wedlock, a public wedding "in all men's sight" being necessary and the reckless mingling of maidens among men being disreputable. (*Odyssey*, vi., 287.) The agony of Ulysses when discovered naked (vi., 129, 178, 219) by the Phæacian maidens indicates that the Greeks of heroic times were on the level of the higher barbarism. One of Solon's laws abolished the right of a man to sell his daughter or his sister, but it seems to have been only partly operative, for we find Demosthenes stating, "My father bequeathed my sister to Aphobus, and my mother to Demophon" (quoted Legouvé, *Histoire Morale des Femmes*, p. 96); and Passius on dying bequeathed his wife to his friend Phormio. Moreover, in the strict letter of the law, as Isaeus tells us, even of his own civilised time, if a woman were married happily and had a family, it might occur on her father's death, as a result of the

distribution of his property, that she might be torn from the arms of husband and children to become the property of the heir. We may reasonably trust that so scandalous a misuse of primitive powers was rare, but the existence of the right pointed back to the barbarian customs of earlier times. Even up to a late period the wife was still bought. Aristotle in his advice to wives (*Economics*, i., 7) reminds them "that they have been bought at a great price for the sake of sharing their husbands' lives and bearing them children".

Strange anomalies in Greek ideals unmistakably suggest the transition from the old to the better feeling. Plato (*Republic*, v., 3) regards it as monstrous that a woman should be seen wrestling naked in the Palæstra, yet he recommends that an unmarried man ought to be indulged by a true friend with the loan of his wife. He clearly favours the idea of a select sort of promiscuity (v., 7, 9); for those youths who distinguished themselves in war ought to be offered every facility for lying with the women, even the married women, in order that stout warriors might be begotten. Of course the picture which Plato draws is purely ideal, but that is all the worse. How low must have been the general tone and practice in Greece when the most exalted of her philosophers seriously recommends the unrestrained sexual intercourse described in the fifth book of the *Republic!* It is true that an adulterous woman was in practice disgraced and her paramour was fined; that in Athens girls were carefully watched, and were supposed to enter as virgins into the married state; but in Sparta chastity was little regarded. Müller tells us (*Doric Race*, book iii., chap. x., sec. 4) that "a husband, if he considered that the unfruitfulness of his marriage was due to himself, gave his matrimonial rights to a younger and more powerful man". If a citizen fell in war without having had children, some other man was assigned, even if only a slave, to raise up issue for the deceased. Xenophon and Polybius both describe the practice of polyandry as being blameless in Sparta, and among the men it is well known that the deepest degradation was common from the earliest times without condemnation. According to Plutarch, all but the kings of Sparta were at liberty, without disgrace, to lend their wives

for a sufficient price. Indeed Aristotle himself, when describing the debasing sensual indulgences whereby the Cretans restrained the increase of their population, has no note of hearty indignation, but only a doubt as to whether it was a good thing or not. He promises a subsequent examination of the propriety of lusts now regarded as so shameful, but he never, so far as I know, redeemed the promise. (*Politics*, ii., 10.)

Duruy, in his *History of Greece* (i., 27), declares that in heroic times "love in our sense of the word was wanting," but all such sweeping statements are to be taken with much reservation. Conjugal love, we may be sure, was present in no small degree, and romantic affections had no doubt their own part to play in the mating of youth and maiden. Moreover, there was a certain sweet ideal of womanly purity in the national mind, as witness the pictures of Andromache, Penelope, and Nausicaa. Yet it is true that the notion of chastity was confined to women, and was only of the best barbarian class. There was attached to chastity enough of value to make the father wish his daughter to be a virgin when sold into marriage, and to make the husband a jealous tyrant in regard to his wife. But no sort of restraint lay upon the men. We have seen how the warrior, without the least suspicion that there was evil in his conduct, appropriated to himself as concubines all the women he captured; and nothing in the history of Greece suggests that, so long as a man refrained from interfering with the rights which a husband had acquired by purchase, any possible harm could appear in the most unrestricted sexual indulgence. No one can deny that the courtesan of the days of Pericles was a woman held in very considerable honour, different of course from that accorded to the matron of a noble family, for aristocracy had its prestige; but want of virtue was by no means laid to the charge of women such as Aspasia; and in many places, especially at Corinth, bands of courtesans were attached to the temples of the gods, so that the indulgence of brute passions was interwoven with the worship of piety.

The friendships of the Greek philosophers with the courtesans of their time form a strange episode in the history of

their race. Socrates owed much to the conversation of one named Diotima; and among the most surprising pictures of Greek literature is that in the *Memorabilia* of Xenophon where Socrates visits the famous courtesan Theodota, taking with him his disciples. Lecky thus describes the conversation: "With a quiet humour he questioned her about the sources of the luxury of her dwelling, and proceeded to sketch for her the qualities she should cultivate in order to attach her lovers. Having carried on a cheerful and perfectly unembarrassed conversation with her, accompanied by no kind of reproach on his part, either expressed or implied, and with no trace either of the timidity or effrontery of conscious guilt upon hers, the best and wisest of the Greeks left his hostess with a graceful compliment to her beauty." (*Hist. of European Morals*, ii., 296.)

And yet, amid all this unconcern about moral purity, the settled life and gentler ways of growing civilisation were offering room for sympathy to exert its power and deepen the quiet happiness of the home wherein a true and faithful love united husband and wife. Even in heroic times Ulysses closes his address to Nausicaa in these words (*Odyssey*, vi., 180):—

> For there is nothing better or worthier
> Than where a husband and wife possess one home
> Accordant in their wishes.

We may be very sure that in the long run such a union would command the respect of a people in whom sympathetic qualities were rapidly developing. Aristotle (*Economics*, i., 8) expresses his aversion to the unfaithfulness of husbands, not as a matter of moral obliquity, but as a failure of kindly and gentlemanly consideration for a good and loving wife. "For in very truth nothing is so peculiarly the property of a wife as a chaste and hallowed intercourse; and that which is most precious in the eyes of a prudent wife is to see her husband preserving himself entirely for her, and thinking of no other woman in comparison with her, whilst she regards herself as peculiarly his own, and is faithful towards him. In proportion as a wife perceives that she is faithfully and justly cared for, so much the more will she exert her energies to show her-

self worthy." Could such sentiments have had but a few centuries in which to spread unmolested and become current, our present ideals of male chastity must inevitably have arisen out of them.

Chastity among Semitic Races.

The Hebrew people as seen in Genesis and Exodus present all the features characteristic of the transition from the highest barbarian level to that of the lowest civilisation. Wives were generally bought. The story of Jacob and of the servitude by which he won his wives Leah and Rachel has familiarised us with the system of working for a wife. But actual payment was common enough. In Exodus xxi. 7 we read, "if a man sell his daughter to be a maid-servant," that is, as the context shows, to be a concubine, the purchaser is not to be at liberty to sell her again to any foreign nation. When Shechem (Gen. xxxiv. 12) became smitten with Jacob's daughter Dinah, he offered whatever might be the needful price for her. Jacob accepted the money, and Dinah was given in marriage, but her brothers took advantage of a wily stratagem to slay the men of the city and ravish all their wives. In Exodus it is enacted that if a man seduce a virgin, he must purchase her to be his wife, or, if her father is unwilling to give her, he must pay him the customary price of such a girl. In the repetition of this law as it is found in Deuteronomy xxii. 28, the price is specified as being fifty shekels of silver. Boaz says: "Moreover, Ruth the Moabitess have I purchased to be my wife". (Ruth iv. 10.) Even as late as the time of Hosea various references indicate that the custom of purchasing wives was by no means extinct. In Professor Robertson Smith's learned treatise (*Kinship and Marriage in Early Arabia*, p. 87) there will be found conclusive proofs that among the primitive Jews the widows and concubines of a deceased man passed into the possession of his heir, who could sell them if he so desired, or keep them as his own concubines.

But even at the time when Genesis was written the Jews

had very definitely reached the upper barbarian standard, which condemns nudity, and is very exacting as to the chastity of married women, while it sets considerable value on the purity of the maiden, but has little to say in condemnation of the sexual indulgence of men so long as they do not infringe on the property rights of husbands or fathers. That nudity was considered shameful is seen in the Jewish legend of Adam and Eve as well as in that of Noah. An overwhelming number of passages testify to the almost ferocious care that was taken of female virtue, but many things conspire to show that a mercantile rather than an ideal view was taken of its importance; such, for instance, as the gross proofs which the bridegroom could demand of the bride's virginity. (Deut. xxii. 17.)

The readiness with which Abraham and the other patriarchs took or put away concubines, the manner in which women were divided as spoils of war, the way in which, while the harlot was condemned, not a word of censure occurs in stories wherein they are visited by the heroes of Old Testament history, all agree in suggesting a practically undeveloped sense of male chastity. Then there was the practice of polygamy, which showed how far they were removed from a high ideal of matrimonial love; and so tenacious were the men of a liberty handed down from their remotest fathers that, as Graetz says in his *History of the Jews* (iii., 94), polygamy was a lawful custom even to so late a date as 1000 A.D., when Gershon was the first Jew of authority to condemn it. Yet even he permitted it in certain cases. Beyond a doubt Hebrew history displays by how slow degrees a nation grows moral, and how it is by the elimination of rude and disorderly elements, as well as by the conservation of the more sympathetic types, never by laws or ordinances, that the amelioration takes place. Thus it is that history can tell so little of the actual process, which is much too slow, much too closely confined to household life, much too subtle in any particular generation, to attract the attention of contemporaries.

Professor Robertson Smith (*Kinship and Marriage in Early Arabia*, chap. v.) describes how lax were the sexual relations in primitive times among the Arabs, but how, in proportion

as women passed by purchase or by capture into the sole possession of definite owners, fidelity came to be expected of them, even while other women, who were still free, enjoyed the same liberty as before, without loss of reputation. The married woman was most unmistakably the property of her husband, and if she failed in her allegiance she was condemned, not for sinning against any high ideal, but for defrauding her owner. If she admitted any other man to her embraces, her husband did as is now done among the Bedouins—he called her father and brothers or other male relatives together; if he could satisfy them of her infidelity to him he proceeded at once, in their presence and with their approval, to cut her throat.

Yet the unmarried woman, of whatever age, and however many children she might have, suffered no disgrace from the utmost laxity; and, as Professor Robertson Smith declares (p. 143), "there was no idea that a man was disgraced by visiting their houses". But a woman of this class was sure, sooner or later, to form a special attachment to some one or other of her lovers, and would go to live with him in his tent or house without becoming his actual property. Such alliances were known as beena marriages. The drawback to them was that the wife and her children were still all legally in the possession of her father, and could be sold as he desired at any time. But there is nothing to suggest that want of chastity as apart from mere rights of property brought any disgrace in early Arabia, except in so far as wantonness led to strife.

Chastity in Rome.

In Roman history we recognise the same condition of things as a tradition handed down from prehistoric times. Of the three forms of marriage, the two that were commonest agree with the marriage by purchase and the beena marriage of the Arabs. The former, called *coemptio*, was that usual among the great body of the people. The bridegroom simulated a purchase of the bride, who thereupon, with all her belongings, passed into his possession, a regular act of con-

veyance being made out as if any ordinary piece of property had changed hands. Such a marriage could always be dissolved whenever the husband chose to make a reconveyance, in which case it was part of the ceremony that the woman should pretend to pay back the price that had been given for her. In historical times, wives were not actually bought by the Romans, but these legal fictions speak forcibly of the time when they were. In the other form of marriage, called *usus*, and corresponding to the beena system, the man and woman merely cohabited for a year. If this were done she passed completely into his possession and became part of his property; but an absence from his house of three days in the year prevented the legal consequences of *usus* from taking effect, and great numbers of women preferred to lose the advantage of legal wedlock, rather than subject themselves to the disadvantage of a kind of slavery.

The third system of marriage, called *confarreatio*, which consisted of various archaic ceremonies centring round a sacrifice and the eating of a sacred cake by the bride and bridegroom, was essentially the wedding ceremony of the priestly class, and none but the offspring of such unions were ever eligible for priestly offices. (Ramsay, *Roman Antiquities*, p. 251.) The spread of this solemn marriage rite, which, however, was never the popular custom, belongs to the period of civilisation, whilst we are in this chapter as yet concerned only with the growth of the conception of chastity as displayed on the barbarian level.

The Romans, at the time when we begin to make out their history, were on the highest grade of that level, and female virtue was distinctly prized. The story of Lucrece and the grim fate of Virginia point to a powerful sentiment of the commanding loveliness of female honour, but there is nothing to indicate that the chastity of men was of any moment, nor yet the chastity of women in general. It was the honour of the matron or damsel of high birth, whose father might hope for her a noble alliance, whose husband had the power and the determination to reserve her wholly for himself. In the story of Virginia, if the decemvir Appius Claudius could have proved her a slave, no law, no sentiment, would have saved

her from his lust; and, till the last days of Roman power, slaves never could marry. They were coupled together to breed for the good of their masters in a union called *contubernium;* but during the palmy days of Rome the chastity of the female slaves was never a matter of any moment, and at all times they were largely used as concubines by their masters, a circumstance which had its share, as we see from Niebuhr (iii., 163), in causing that deterioration of the Roman character which was a large factor in the fall of the empire. There is complete evidence (Mommsen, i., 158) that in the times of the kings it was a crime for a man to seduce a married woman, but otherwise he was unrestrained. As Lecky puts it, somewhat mildly however, "unnatural love and adultery were regarded as wrong, simple unchastity before marriage was scarcely considered a fault". (*Europ. Morals*, i., 104.)

Cicero, in his speech on behalf of Cælius (xx., 48), expressly asserts that this was the Roman feeling and his own as well. "Now if there be any," he says, "who fancies that youth should be forbidden the embraces of courtesans, he is indeed unnecessarily severe; I will not argue the point, but it is quite opposed to the custom and concessions of our ancestors. When has it not been done? When blamed? When forbidden? When, in short, has that which is now proper not been proper?"

If we take Cato the Censor as the well-known type of ancient Roman austerity, we find neither in Plutarch's picture, nor in the laudatory references in Horace and other writers, any reason to believe that virtue in a man was to him of value. He objected to excess of all sorts, but that he should take a female slave to share his bed seemed to him unobjectionable. Mommsen truly enough says of him that his idea of chastity was one wholly worldly, and we have fairly good evidence that he regarded youthful incontinence as a matter of no concern.

Even the virtue of the early Roman women is not to be taken too literally. It rests largely on the testimony of poets and other praisers of times past. It probably belonged mostly to the class of mere respectabilities; the good wife

would stay at home and spin her wool; the damsel who hoped for a good husband would be seen but little abroad. And yet, while conforming to the desires of those males who for the time were their owners, they might be only prudent rather than pure. It is in this way, as it seems to me, that we can account for the subsequent degradation of the Roman women, when, as Niebuhr says, "their degeneracy and profligacy were awful". It is almost inconceivable that a race of pure-minded and inherently modest women should in a few generations so far have lost their nobler ideals. It may have been that the influx of slaves and foreigners made a new blend of national character; thus perhaps in part; but to a much greater degree the cause is probably to be found in the fact that the truly virtuous type in early days was far from common, good conduct being compulsory rather than of choice, and that as soon as the influx of wealth loosened the old restraints the true character of the people was made plain.

Teutonic Chastity.

When our own Teutonic ancestors emerge into the light of history they are upon the upper barbarian level. Among them all the wife was purchased. The laws of the Saxons say (*Codex Legum Antiquarum*, Lindenbrog; *Leges Saxonum*, tit. 6) "one who is going to marry a wife must pay 300 shillings to her relatives, but if without their consent he take her, the girl being willing, he must pay 600 shillings". Law 7 says that "if a mother be left a widow, she must pass under the tutelage of her step-son, or, if she has none, of her husband's brother. He who wishes to marry her must pay the price to her guardian." It is hard to think of our forefathers as people who sold their step-mothers, nay, in some tribes, even their own mothers. The laws of the Angles and Werini have the same class of provision. In those of the Burgundians it is enacted that if a girl be ravished and return corrupted to her parents, the ravishers must pay them six times her marriage value. If he is unable to pay, he must be handed over to the parents, that they may do to him as they please. If a man kill a girl under child-bearing age, he must

pay 200 shillings; but if she were old enough to have had children he must pay 600. So grossly utilitarian were the views of a fairly specimen Teutonic tribe!

The laws of the Longobardi constantly mention the price that is to be paid for a wife. (Book ii., tit. 1.) If anybody puts away his wife without any fault on her part and marries another, he must pay 500 shillings, half to the king and half to the relatives of the wife. The woman has no share in the compensation paid. She is only property, and the loss is not hers, but that of her male relatives. Even if she was ravished, it was considered no injury to her, but only to those whose property was depreciated. For we read (Bk. i., tit. 30) that if a man violates a woman he must pay 900 shillings, of which half goes to the male relatives and half to the king; but if she has no male relatives, these laws never contemplate for a moment that half should be given to the woman herself. The whole compensation then goes to the king.

The same principle of conservation of property runs through all the Teutonic laws. In those of the Allemanni (tit. 58.) a man who takes indecent familiarities with a woman pays a compensation of twelve shillings to her nearest male relatives; if he violates her he must pay forty shillings to the relatives. These are the fines in case of an unmarried woman. If she be married they are to be doubled. Among the laws of the Bavarians we find that a man might seduce a free woman for a fine of twelve shillings, but if he seduced another man's wife he had to pay him 140 shillings. (Tit. 7.) If he violated a virgin he had to pay forty shillings; if a widow he paid eighty shillings.

There is absolutely no law in the whole of this huge collection which would indicate the least appreciation of purity as an abstract ideal. Everywhere it is the sordid care of property. Take, for instance, this law of the Frisians: "If a man seduces or violates a slave girl, let him pay four shillings, but only three if she had been corrupted before. If he is only the third, let him pay two shillings." So the scale goes on diminishing until it becomes legal for him to debauch a slave girl as often as he pleases at the rate of one-third of a shilling for each occasion, the fine being paid to her owner of course.

But long after these Teutonic races were settled in England the same sordid view of woman's virtue was prevalent. A law of Ethelbert of Kent, the first Christian king in England (564 to 616 A.D.), provides that any one who commits adultery with another man's wife must buy him a new one (quoted Hume's *Hist. of England*, i., 293); and Pike, in his *History of Crime* (i., 91), quotes a compilation of the laws of Wessex made by a bishop of Winchester, in which the purchase of a wife is referred to as the usual custom. Lappenberg, in his *England under the Anglo-Saxon Kings* (vol. ii., p. 338), says that "marriage was contracted after the bridegroom had settled with the friends of the bride the purchase price which belonged to the relation in whose guardianship the woman was at the time of her betrothal". He states, however, that "we do not find any traces that the husband among the Anglo-Saxons possessed the power of selling his wife". That this power was formerly not only possessed but exercised we have many indications. For instance, Tacitus (*Annales*, iv., 72) states that the Frisians, finding it difficult to raise money for the oppressive taxes imposed by the Romans, sold their wives for the purpose.

We cannot imagine that any high ideal appreciation of chastity existed among the Teutons. Too many historic facts forbid it. When the emperor Valens permitted 200,000 Goths to cross the Danube and settle in Thrace, the provincial governors wished to remove their arms from them. The Goths objected, but found that they might keep their arms if they surrendered their wives and daughters to the wanton pleasures of the Roman officers. They chose the ignoble alternative. (Gibbon, chap. xxvi.)

Canute abolished in England the purchase of wives somewhere about 1030 A.D. (Kœnigswärter, *Etudes Historiques*, p. 35), but among the lower classes it was a practice for long centuries after that time. Professor Geiger tells us that among all the Scandinavian races the wife was bought (*Hist. of the Swedes*, p. 31); and the laws quoted by Kœnigswärter show that the son had the right to sell his mother when she was a widow. In Norway, Sweden, Denmark and Iceland, even after the bulk of their population had been converted to

Christianity, a marriage was scarcely valid unless a price had been paid for the bride.

All this is inconsistent with any really high appreciation of women, but it is quite consistent with a strict supervision of her chastity. The guilty wife, according to Tacitus (*Germania*, xix.), was scourged naked through the district, itself a proceeding which showed that a sense of delicacy was not the cause of indignation. But the picture of Tacitus, if it can be relied on, indicates a state of society in which the steadiness and regularity arising from marriage by purchase had worked out their own form of progress, and women had learned to regard fidelity to their purchasers as the most respectable of womanly qualities. Men contented themselves as a rule with one wife, but as divorce was easy this was only natural. Powerful chiefs generally had two or three, but the number who could afford to do so was small. Every man had the power to put his wife to death when he pleased, and he could legally put her to the torture.

Kœnigswärter shows that in the primitive Celtic races marriage was by purchase, and we find that this custom lasted in Wales until about 800 A.D. Woodward, in his *History of Wales* (p. 186), says that the laws of Howell, belonging to that time, "recognise a degree of laxity respecting female honour, and an absence of feminine delicacy such as could scarcely be paralleled". Probably he had not read much in the social history of other barbaric peoples.

Without endeavouring to extend our examination over the whole area of barbarian history, we may take it as tolerably well proven that, whether now or in the past, a race, as it moved onwards through barbarism to civilisation, experienced a stage in which the purchase of wives formed what Kœnigswärter calls (p. 43) "the most efficacious means of converting irregular unions into stable marriages," and that this strongly tended to foster a custom of fidelity among women, without at first giving rise to any great appreciation of personal purity. But even this feeling would arise during the course of long centuries in which the faithful wife was extolled, and the maiden was trained from her earliest youth to regard herself as dishonoured if she departed from the customs of her people.

No hint of the obligation of chastity upon men would arise in such a case, and the fact that this has been the actual course of the history of progress has made several writers of late years refer somewhat cynically to the purchase of wives as the sole cause of the growing idea of female chastity. The cudgel and the spear of her owner taught the woman to keep herself for him alone. From such a view I would most strenuously dissent. An accessory it has manifestly been, but only an accessory; for under all progress of conjugal fidelity, I see in the history of every race the influence of sweet domestic sympathies. Fear by itself never could have raised the noble ideal of a woman chaste in her inmost thought even as in her actions. Love has had the supreme part to play; and the silent but tenacious affections that grow up when daily lives are spent together have given a simple and practical foundation to feelings which, in ways to be described in later chapters, assumed more and more an ideal character. This abstract enthusiasm for virtue is not to be sought on the barbarian level; it begins and grows only with civilisation. Yet the barbarian has a fairly good working substitute in the sense that the wife's fidelity is due to her husband, and that she is worthy of punishment and disgrace if she extends to others those privileges to which he alone is entitled. It is a very homely sort of virtue which is thus created, yet it is that which perhaps still has the largest control in the practical everyday life of our own communities; and it is only when this somewhat surface quality has been for centuries in existence that there is opportunity for the growth of that exquisite sense of the beauty of womanly purity which is expressed in Heine's famous lines:—

Thou art as are the blossoms,
  So sweet, so pure, so fair;
I look on thee, and yearning
  My heart is full of prayer;

As if upon thy ringlets
  I laid my hands, dear child,
Pleading that God might keep thee
  So pure, so undefiled.

CHAPTER IX.

THE STATUS OF WOMAN AND THE CHASTITY OF MEN.

Sympathy the First Origin of Male Chastity.

There are three causes why the chastity of men grew up as an ideal so much later in date than that of women. In the first place, their sexual passion is more intense, and in so much the more difficult to regulate; in the second, it is much less interfered with by parental cares, for the mother, absorbed in the nurture of her babe, is, by the maternal love which she lavishes, rendered so much the less disposed to amorous intrigues; and, lastly, the man is not restrained by any sense of being owned by a wife more powerful than himself. The rise of a chaste ideal for men will depend wholly upon sympathy, which will display itself in regard, first, to the married, afterwards to the unmarried woman. In the case of the man's own wife, if he truly loves her, his sympathy will prevent his causing her unhappiness by preferring other women to her. In the case of the wife of another, in addition to the fear of the husband's vengeance, there would be some scruple in the mind of a man of any sympathetic feeling if he subjected her to the blows and ill-humour of her jealous owner; and few men would be so thick-skinned as to feel in no degree the condemnation of the community which felt the unfairness of interfering with property which another man had paid for.

In regard to the unmarried girl, the scruples of men are of much later date; but if we suppose that stage to be reached in which the father and brothers of a maid are to receive a certain sum for her when she attains the age of marriage, and assume that her value depends to some extent on her

purity, as it almost always does at the level of the lower civilisation, it becomes clear that a strong public feeling will arise in condemnation of the laxity even of unmarried girls. When this has been long operative, the girl detected in an amour stands abashed, and in some of the Malay and Mongolian races suicide under such circumstances is not rare; the early Jews and neighbouring peoples put to death girls found guilty of looseness. Some of the Papuan tribes keep their maidens in cages to ensure that they may be uncontaminated at their marriage, and analogous customs of Polynesians have already been mentioned. From such coarse discipline sprang the modesty of the maid in the early civilisation; it grew and gathered a personal dignity of its own, and as it grew there must have arisen in the minds of men who were in any way sympathetic a certain reluctance to cause unhappiness and degradation to the damsel still in the fresh joyousness of youth. How very imperfectly the lesson is yet learned may be easily seen in the average conversation of men even in the most cultured of existing nations. How many there are who would scorn to lay siege to the virtue of a girl, and yet would scarcely hesitate to take advantage of the girl who offered herself, a plain proof how much less, in huge multitudes of cases, the chaste life of a man depends on a sense of personal purity than on a sympathetic reluctance to blight a young life.

This is, of all the three, the most strongly operative cause in producing the ideal of male chastity; and cases have been far from uncommon, even in societies where profligacy was fashionable, in which the pity of the practised rake has saved from degradation the otherwise helpless victims of his power or his craft. We reckon that the man who can seduce a girl of tender years is an absolutely heartless scoundrel; and in the face of the huge temptation which the sight of young, innocent, and unsuspecting beauty presents to the passions of men, this feeling of sympathy, this aversion to the deep cruelty of deception, is the chief protection to the purity of maidenhood.

It is the spread of this sympathetic feeling which, in part, renders possible the free and little distrusted sociableness of

the sexes in our modern communities, a freedom of intercourse which exists in savage races merely because modesty is not esteemed. But so soon as the virtue of women comes to be prized in barbarian races and those of lower civilisation, this liberty disappears because the chastity and honour of the men cannot be trusted, and women are more and more secluded, until, in the course of progress, people may begin to rely on the absolute pure-mindedness of the cultured young lady and the perfect honour of the gentleman, founded on the scorn he would feel to injure confiding innocence. In that case an amount of freedom may be allowed that would scandalise a race wherein female chastity was valued, yet little trusted, and male chastity a quality scarcely conceivable.

Thus we perceive that, in its broad practical aspect, the chastity of men has depended on sympathy for women, and has grown along with it. The progress of this idea must always, therefore, have been roughly proportional to the estimation in which women were held; where they have been the drudges of men, where they have been little more than the instruments of their gratification, there it has been vain to look for any widespread ideal of chastity in men; where they have been considered immeasurably inferior to men, so that these have felt a lessened sense of sympathy towards them; where their lives, their pursuits, their happiness, their experiences, have been considered of small importance as compared with those of men, the obligation to purity in males may have been felt, but only in small degree. But in proportion as women have been made the equals of men, to share their hopes, their aspirations, to be companions not only of the home but of the inner life, so has the ideal of male chastity asserted itself.

From the level of lower civilisation onward, therefore, the status of women and the chastity of men have been intimately bound together, depending, as they have always done, on the same cause. For only by the sympathy of man can woman be raised to his own level. He has the power to keep her in subjection, and the early selfish instincts bid him exercise that power. Not till sympathy has secured a wide empire over his mind can women hope for equality; and

since by that time the ideal of womanly purity had grown strong and the degradation of the loss of virtue most pronounced, the same sympathy must have operated in giving rise to the ideal of chastity in men.

The Status of Woman not the Same as the Treatment She Receives.

We must, however, make a clear distinction between the status of women and the treatment given to them. A woman may have no status whatsoever, and yet may be content enough with her treatment. She may have no rights, her life may depend on the caprice of her husband, who may be at liberty to thrash or wound her as he pleases; she may be set to all the menial drudgery of the daily life, yet withal be thoroughly happy. Brought up from infancy in complete submissiveness, she is so subservient to her husband that her life is secure; wounds are rare, and blows only occasional; her drudgery follows its own routine, and in her own life of child-like dependence and tractableness she is happy.

But this is not the condition out of which the ideal of male chastity arises. In proportion as sympathy grows, the distinctions of strength disappear, and the woman, while perhaps not visibly happier, gathers around her an increasing dignity. It is this status, therefore, that we have to examine as the concomitant of male chastity.

As far as happiness is concerned, we may very reasonably conclude that where health is present, it is tolerably evenly distributed through all grades of progress. In her own way the savage woman is perhaps as happy as her most highly cultured sister. The quality of the happiness may vary enormously, but the amount of it is probably not nearly so variable. The traveller who observes a savage give his wife a kick or a blow concludes that her position is a wretched one, but to her that treatment may be less unkind than a harsh word to a civilised woman, or a passing slight or a loveless look to a cultured lady, whose sensibilities quiver in the most delicate susceptibility.

Sir John Lubbock, speaking of savages, says that "true

love is almost unknown among them". It is a rash generalisation, founded on the reports of travellers who have judged them by a standard wholly inapplicable. For instance, a careful writer on Melanesia relates that when he suggested to the men that instead of idling about they should assist the women in the labours of the plantation, he was met with derisive laughter. He thence concluded that the position of the women was very miserable. Yet suppose he saw an English navvy out of work, and advised him to go down on his knees with the scrubbing brush and help his wife to get through her long day's task, would he not be met by very much the same degree of scornful surprise? Yet it would be a rash thing to assert that "true love is almost unknown" in these classes. Love, as it seems to manifest itself to us in its highest phase, is unknown, yet that navvy would face hard toils of his own department, would undergo sufferings, and brave a cruel death rather than that want should overtake her whom he loves in his own fashion. Only save him from the degradation of the scrubbing brush and the washtub! These men have to be judged by their own ideals and prejudices, and so have savages. Hence the discrepancies in the reports of travellers. Some fix their attention on the status of women, others on their actual share of happiness; each of these classes varies very much in the amount of effort it makes to see things rather from other folk's point of view than from its own.

For instance, of the Australians, E. J. Eyre says (*Discoveries*, ii., 320) "it is easily to be understood that the love betwixt married people can scarcely be great". Yet Brough Smythe says, "A common error is that there exists no settled love or lasting affection. Though men make drudges of women, the latter are cheerful, and married couples are bound by strong affection" (i., 29). And Curr tells us "a man might ill treat his wife, give her away, kill her, or do just as he liked with her and no one in the tribe interfered". (*Squatting in Victoria*, p. 248.) Yet "the women were generally chatty and merry" (p. 250) and "a very noticeable feature of the tribe was the harmonious way in which its individuals lived together" (p. 264). "Most women bore about their

persons proofs of savage treatment at the hands of their husbands, but putting aside occasional ill usage, it always seemed to me that the women were happy enough and got on very comfortably with their lords" (p. 147).

Of the Tasmanians Bonwick says, "Our fair friends, with all their trials, including an occasional waddying from their enraged or jealous partners, were a merry garrulous party" (*Daily Life*, p. 56), and again (p. 10), "The conjugal attachment had not the romantic character of civilised nations, but was not wanting in real kindness. As in almost all countries, they considered the woman to be inferior to the man, and treated her accordingly."

Of the Ainus of Japan, Savage Landor says (p. 296) "love is very animal, and there is no sign of true affection". Yet Mossmann declares (*Japan*, p. 36) that the wedded couples are very companionable and faithful to the conjugal tie. Of the Todas among the mountains of Southern India, Colonel Marshall says that women at betrothal are sold, and it is not uncommon for several men to club together and buy one wife between them, "yet though the woman has no property she enjoys a real influence and has a good position". (*Todas*, p. 213.)

Nansen says of the Eskimo (*Across Greenland*, chap. x.), "As a rule the men are good to their wives. Domestic strife is not unknown and it sometimes leads to violent scenes, the end of which generally is that the woman receives either a vigorous castigation or the blade of a knife in her arm or leg, after which the relations of the two become as cordial as ever, especially if they have children." Bancroft says that the Eskimo husband is not unkind, though the women certainly do the most laborious yet not the most formidable work. The Thlinkeet women, he tells us, have great influence. The Aleuts and Tinneh, though they buy a wife and sell her again without ceremony, "are fond of their wives and jealous of them". (*Native Races*, i., 123.) So among the Nootkas and all the Central American races, the status of the women was low, but their treatment not unkind. They were always bought to be wives, and might at any time be resold or exchanged; but they had much influence and were constantly consulted. (*Native Races*, i., 196.)

Of the Cherokee Indians, C. C. Jones states that "women were doomed to perpetual drudgery; marriages were often temporary, but it was not uncommon for two people to live together in peace and harmony to an advanced age". (*Antiquities of the Southern Indians*, p. 69.) Lewis and Clarke say "the women are the property of their husbands, and are always kept in a very subordinate state, yet they are always consulted and have much influence. The youth must always get the consent of his sweetheart before buying her, and the parents rarely try to force a daughter's inclinations." (*Travels to the Pacific*, p. 149.) They conclude a long review by saying "the North American Indians are not in general void of conjugal affection".

Schoolcraft, in an excellent little work called *The Indian in his Wigwam* (p. 73), says that "the wife rules the lodge, assigns the sleeping places, and directs where each is to place his effects". He feels certain that the usual severe judgment formed of conjugal life among savages ought to be greatly modified. "The Indian in his wigwam is a mild considerate man, who interferes little, but leaves things to his wife to manage. However, on shifting the camp the women carry the utensils, fixtures and tents."

Of the Patagonians, Captain Musters relates (p. 196) that "the finest trait in their character is their love for wife and children, matrimonial disputes are rare, and wife-beating unknown". A. R. Wallace (*Malay Archipelago*, p. 91) gives a vivid picture of the hard labours of the Dyak women, but Karl Bock, speaking of the same women (*Head Hunters of Borneo*, p. 210), states "that though they are the beasts of burden and are soon worn out, yet the men show great respect for their wives, the husband never does anything of consequence without the advice of his wife, nor the wife without the advice of her husband," and H. Brooke Low (*Anthrop. Inst.*, xxi., 127) entirely agrees with this latter opinion.

For the negroes as a whole, the testimony is somewhat conflicting; but, using Fetherman's laborious compilation, we find that of fifty-seven peoples who are described in it, there are twenty of whom it is stated that their women are treated

with affection and consideration; twenty-two for whom the record is that wives are fairly well treated, and only fifteen of whom an evil report is given, that they treat their women with little affection and allow them little influence.

Among the Polynesian races, it is true, as Quatrefages says (*Les Polynesiens*, p. 45), that "woman is regarded as inferior to man, made to serve him and submit to the rudest labours," and yet in all these peoples the women are very far from being unhappy. Of the Maoris, Taylor says (*New Zealand*, p. 338), "Wives in general were treated with great respect, and had a voice in all their councils; in fact, they enjoyed great liberty, and perhaps there are few races who treat their women with more deference than the Maoris".

So also among the Malays who are upon this level of progress, women are treated with no little consideration, though almost invariably at the level of the upper barbarian, we have the same record of a general domestic equality arising out of natural love and sympathy, along with much that indicates the superiority which man arrogates to himself by reason of his superior strength.

Niemojowski in his *Siberian Pictures* (i., 142) says that the Tatars have an idea that women are very much inferior to men, and yet the women really manage everything. And Huc says (*Travels in Tartary*, "Nat. Illus. Library," p. 187) that "the women lead an independent enough life. They are far from being oppressed and kept in servitude. They come and go at their pleasure, ride out on horseback, and pay visits from tent to tent." In Marco Polo's description of a great Tatar feast (chap. xv.) the ladies sit at the banquet in honoured positions.

The Decline of Wife Purchase.

When, therefore, we begin the story of the progress of conjugal sympathy among civilised peoples, we must understand that two things have been already fairly well established at the higher barbarian level: first, the general obligation to chastity among women, and second, the right of a woman to be treated with kindness by her husband. But just as her

obligation to chastity is not accompanied by any notion of a similar obligation on his part, so the right she has to kind or even courteous treatment in no way diminishes the sense he feels of his own great superiority.

The legal relations of a married pair are that the wife is the property of the husband; that she may be put to death, or, when that right has become obsolete, may be chastised by the husband, who, moreover, has the power of divorcing her when he pleases, while no amount of profligacy on his part can justify the wife in demanding a separation from him. Yet though this is the law, in everyday practice the wife has quite a different position. For whatever may be the male bluster and the assertion of manly superiority, the wife within the home has employed, to secure a real influence, not only her natural charms, but also the skill acquired through long centuries during which a quiet pertinacity has been concealed under the semblance of docility and submissiveness; in short, there has grown in the sex a certain feminine tact by which, while appearing to yield, she contrives to make at least all household matters drift imperceptibly in her own way. Some women would prefer it so, being perfectly willing that the men should lay down the law as much as they please, so long as they themselves shape the actual policy; yet the progress of the conjugal sentiment throughout civilisation has consisted in the removal of female disabilities, and a gradual advancement towards a status of equality. For conjugal sympathy is certainly only imperfectly developed when the husband has the right, however rarely exercised, to buy, to sell, to divorce, to thrash, to kill his wife as he pleases.

Of these rights the first to die out was that of property, which, when civilisation began, the husband regularly asserted in the person of his wife. He had bought her for a price from her male relatives who were her previous owners, and she was now his possession. But on the level of the lower civilisation, the purchase money ceases to appear except as a symbol in the marriage ceremony; or, if articles of real value are given by the bridegroom, it becomes a matter of honour for the parents of the bride to hand them over to her, either to be her own peculiar property, or to form her con-

tribution to the establishment of the joint household. This is the natural result of a growing parental affection. The barbarian father is fond of his daughter; when she is a baby he caresses her and makes much of her; but as she grows older his love distinctly declines, and it cannot prevent him from making a callous profit out of her when her charms have inspired some lover with the desire of possessing her. But the civilised father loves his daughter with an equal affection when she has grown to the full stature of early womanhood; and love of that sort is intolerant to the thought of making a mercenary bargain of her. It grows to be a custom honoured by every affectionate father and admired by all who can appreciate the kindly and condemn the sordid in conduct that the price should be handed over to the bride, or else the purchase money should be refused altogether, though sometimes perhaps continuing to be simulated in the wedding ceremony by reason of the veneration of old forms.

When this stage has lasted some time, and the purchase of wives has grown obsolete, parental affection, in its still continuing growth, brings about a system which is its complete opposite, the custom of giving a dowry with the bride. The father, in his love for his daughter, is anxious that she should marry well, which means that he desires for her a husband of as much wealth and social position as he can secure for her. Along with this kindly feeling there go the more selfish motives of family pride, and a desire for that influence which arises from well contrived matrimonial alliances. Except in the case of people whose rank gives a political or semi-political cast to their domestic alliances, we may regard the latter motive as subsidiary, and estimate that in regard to the average father, a strong parental affection, fortified by growing usage and the weight of public opinion, would make him more and more inclined to use some share of the wealth he possessed as a means of securing for his daughter a good husband, and what he would reckon a happy match.

There have been nations of high civilisation in which this dowry system passed practically into the purchase of husbands. A young man who was considered particularly

eligible would select among the young girls of whom he had the refusal, her whose father offered with her the highest dowry. But in proportion as sentiments of genuine sympathy prevail in a community, this feeling, equally sordid in the other extreme, comes to be condemned. That pecuniary interests, either on one side or on the other, should conspicuously enter into the motives which lead to marriage becomes repulsive to the increasing delicacy of feeling; and so we find that in cultured communities the dowry dies out, just as the purchase money declined in the civilised stages. Love and love alone, the pure affection of youth for maid, and maid for youth, is now held to be the only motive for marriage which modern sentiment can allow with any satisfaction, and we may justly regard this as being, so far as it goes, the triumph of the truest general spirit of conjugal sympathy that the human race has yet known.

We may observe three stages of progress: the bride-price, the dower, and the dowry. The dower arises when the father refuses to accept the price which the bridegroom offers, and the latter hands it over to the bride; but when fathers have grown accustomed to this degree of disinterested feeling, they begin to augment their daughters' property, so that they may enter the married state with sufficient honour. The portion thus given by the father is called a dowry. This distinction between dower and dowry is rarely made in our language, but it corresponds exactly to the difference between *douaire* and *dot* in French, and as there are marked contrasts, both historic and legal, between the marriage portion which the bride receives from her husband and that which she receives from her father, I shall take the liberty, for the sake of brevity, of using the two words in these contrasted meanings.

Returning now to relate these various stages of progress in detail, we have first to consider the manner in which the system of wife purchase declined. It is a process of which we have more than a hint in many of the barbarian races of the highest level; for even among a people whose ordinary custom is the sale of daughters, there may be those who would feel ashamed of so callous a transaction. The Javanese father, according to Crawford, receives the payment

which is customary, but he hands it over to the bride immediately after her marriage, to be her own property; and the same kindlier usage obtains among the more refined classes of the Tatars and Arabs. Indeed, there are barbarian races in which the better classes even go further, the father adding, to the price thus returned, a sum which testifies to the affection he bears his daughter; and so it happens that in races of a gentle disposition the system of giving a dowry with the bride is reached at a comparatively early stage. For instance, in Madagascar the bride generally brings with her a dowry, which, even though the husband may use it, must always return to her in case of divorce.

But whilst we find, at this lower level, abundant indications of the intrusion of worthier motives and more amiable customs, we may say, on a broad estimate, that only in the progress from the lower to the higher grade of civilisation does the system of purchasing wives gradually die out. Among the more civilised Tatars, according to Huc (*Travels in Tartary*, "Nat. Illus. Lib.," i., 185), the form of marriage is a contract of sale, and the bridegroom has to pay the stipulated price; but at the wedding itself the parents and relatives of the bride always bring sufficient presents to form an equivalent of the price paid. This is a point of honour among them. In Afghanistan, according to Perrin, while marriage is indubitably the sale of a girl to be a wife, her parents, if people who hope to be at all respected, give with her a dowry of carpets, or of iron and silver goods, which are supposed to equal the value of the price that has been paid. (*L'Afyhanistan*, p. 74.) In Morocco, as Rohlf declares (p. 44), the bridegroom pays a price equivalent to about thirty pounds to the bride's father; but the latter, if a man of respectable position, never keeps it; he lays it all out in a suitable trousseau for his daughter. In Persia, Sir John Malcolm tells us that a man may take a wife into his family in three ways: either by purchase, or by hire, or by marriage proper. In all cases the woman's consent is necessary; she cannot be sold or hired by her parents against her will. A man may resell an inferior wife or a concubine, but public opinion is now strongly against it, and it is rare. (*History of Persia*, ii., 589.) In all

respectable classes of society, however, the purchase of wives is now obsolete, and in general the father of the bride endows her as liberally as he can, the property she thus carries with her into the marriage state being strictly her own.

E. W. Lane, in his *Arabian Society in the Middle Ages*, p. 229, explains that when a girl was married the bridegroom had to pay for her a price which might range between five shillings and thirty pounds, yet the usages of refined society insisted that this money should not be accepted by the father for himself, but should be spent by him in providing furniture for the new home; all things, however, which were so provided remained the bride's personal property; a very clear case of the transition from the purchase of wives to its abolition. Of twenty-five existing races which one may enumerate as of the Arab stock, twelve of the least advanced still have the custom of purchasing wives; in six others a form of sale is retained, but either the price is returned, or else it is reduced to a mere symbol; in seven of them even the form of purchase, though known to have once existed, has altogether died out. Professor Robertson Smith (*Kinship and Marriage*, pp. 78-84) shows how among the ancient Arabs the purchase money became gradually transformed into a dower. The words of the Koran, "that ye may with your substance provide wives for yourselves," seem very plainly to indicate the old system of purchase, but the verse which follows indicates that the price no longer passed to the bride's parents, but became the property of the wife herself, "and for the advantage which ye receive from them, give them their reward according to what is ordained". (Koran, chap. iv.) In the same chapter it is decreed that if a man propose to divorce his wife he must by no means take away from her this price which he gave to her as a compensation for the loss of her maiden state. By degrees this has passed into the modern Mohammedan law of dower, according to which a man at his marriage must settle a certain proportion of his property upon his wife, which she and her children can claim and secure in a court of law out of his estate in the case either of his death or her divorce. (Creighton, *History of Arabia*, p. 246.)

Miss Cort, who lived for many years as a teacher in girls'

schools in Siam, states that in that country the orthodox form of marriage is for the bride to be purchased, but that very often the price is a mere form, for whatever it is, her parents keep it only till the birth of the first baby, when it is handed over to the young mother. (*Siam*, p. 199.) Among the Chinese the actual purchase of a bride prevails in all the lower classes, but people with any pretence to refinement or good breeding shrink from the meanness of taking money for a daughter, and though it is still the fourth essential of the wedding formalities that the bridegroom should send costly presents to the parents of his intended (Prof. Douglas, *Soc. in China*, p. 194), these are always at once handed over to her for her own use, or are employed in buying for her a wedding outfit. Moreover, a family that has any pride will take care to avoid any semblance of meanness, by adding thereto as much more again in order that their daughter may enter her husband's family well enough provided for, to do honour to the friends whom she has left.

Archdeacon Moule (*Old China and New*, p. 623) states that, according to the letter of Chinese law, "the legality of marriage consists in the interchange of papers, and in the payment to the bride's father of the sum fixed on at the betrothal. Yet this is hardly purchase money, for the sum is, in theory at least, expended on the bride's trousseau, and is thus eventually returned to the bridegroom's family." In the lower classes, however, the old form still prevails in all its grossness. Thus Doolittle, who lived fourteen years in intimate daily life with the Chinese, says that when a poor family is unable to afford the price of a maid to be wife to their son, they often scrape up enough to buy the wife of some man who is willing to get rid of her. Yet the woman must herself express her willingness to change, and the former husband is bound to make out a formal deed of sale, if the marriage of the new one is to be valid. (*Social Life of the Chinese*, i., 107.) It would be safe enough to reckon that the larger half of the Chinese disdain the mercenary form of marriage which is still practised among the classes of least refinement. In Japan, of the old feudal times, there seems to have been the same mixture of customs indicative of

transition; among them there has apparently been no marriage by purchase within recent times, but Westermarck (p. 395) thinks that the punctiliousness with which the exchange of gifts is observed during the wedding ceremony is a clear proof of a once prevailing purchase of the bride. Her parents must give to the bridegroom presents of exactly the same value as those which he brings to them.

A similar state of instability between the old usage of purchase and the newer feelings against the sale of daughters must have attended the early civilisation of the Hindoos; for we find in the ordinances of Manu a frequent wavering between the old view and the new. Chapter viii., verse 204, provides that if a man has been promised a girl in marriage, yet another is palmed off upon him at the actual wedding, "he may marry them both for the same price". That this was the old custom, yet opposed to the existing state of feeling, is shown by the addition of the excusatory words "so said Manu," yet we read (chap. iii., verse 51), "A father who knows the law should never take any consideration, not even the smallest article, when his daughter marries, for a man who takes anything is a seller of his child". And still more strongly (chap. ix., verse 98), "Not even a Çudra" (the lowest class of peasants) "when giving his daughter in marriage should take purchase money; for by taking money one makes a secret sale of one's daughter". The Mahabharata (xiii., 45) declares that "he who sells his daughter goes to hell; the sale of a daughter, although practised by some people, is not the eternal rule of right". After comparing twelve different passages of Manu, one of his most recent translators, Dr. Burnell, states (p. 261) that among the Hindoos "the purchase of the bride was the more ancient form, which the later writers sought to eradicate". And these passages plainly state the reason; it had grown repugnant to temperaments of increasing sympathy that all the love of a father for his little maid should end in a heartless sale of her to a stranger.

In the India of the present day among so vast a population, so much mixed and of so many varied degrees of advancement, different customs prevail in different parts, and in spite of all that sacred books may say, the sale of daughters

is with the lower classes a daily operation. But among those who pretend to respectability, and especially those who profess to follow the precepts of their religion, it is most disgraceful to accept the smallest gift from a bridegroom, lest there should be even a remote semblance of a sale. Elphinstone in his *History of India* (p. 158) says that "the point of honour in this respect is carried so far that it is reckoned shameful to receive from a son-in-law or brother-in-law any assistance whatsoever in after life".

In some parts of India, not only did the system of selling girls decline and grow to be a thing disgraceful, but the system of dowry arose to take its place; and in Rajpootana, the most extravagant importance is attached to the provision which is thus made for a daughter on her marriage. It grew under the influence of religious zeal and family pride to be so great a burden, that parents, rather than face the disgrace of having inadequate dowries for their daughters, used to destroy some of their female infants at birth.

Among the Jews the mohar or price paid for the bride lasted for long centuries. It existed even in the civilised times of King David; for when he was offered the honour of becoming King Saul's son-in-law, he expected to have to pay for Michal, the princess whom he was asked to marry; but Saul demanded a price of such a kind that David by his valour was able to secure it. (1 Sam. xviii. 25.) This must have been about a thousand years before the beginning of our era: three centuries later, the bride-price was still an institution, for the prophet Hosea says he bought a wife for fifteen pieces of silver and a homer and a half of barley. (Hosea iii. 2.) The bride by this purchase became the actual property, part of the household chattels, of the husband. Several expressions in the Koran seem to imply that this stage lasted among the Arabs down to the times of Mahomet, but the Jews made earlier progress, and Westermarck quotes Mayer's account of the laws of the Israelites to show that first of all it became customary to hand over to the bride herself a part of the price paid for her, and at a later date to give her the whole of it. (*History of Human Marriage*, p. 413.) But by degrees it ceased to be the bridegroom who furnished this bridal portion;

for in the Talmudic law the price became merely symbolic, and at a later date the father of the bride himself supplied a marriage portion for his daughter which, according to Mayer, was called the nedunia. In later days it became a religious duty for a man to give a dowry to his daughter, though, in their own original code of laws, so different a state of things had been ordained. But in truth it is not surprising to find that the steady development of the same principle of parental sympathy has had in almost every race the same general effects.

Rise of the Dowry System in Europe.

Among the Greeks we see, even in heroic times, some little scruple among fathers at taking the whole of the bride-price to themselves, and this feeling had so far progressed that in the early days of Athens, the bridegroom's presents were made, not to the father, but to the bride herself; either (*ὀπτήρια*) when she was first brought out from the seclusion of the gynæceia, or (*ἀνακαλυπτήρια*) when she first uncovered before him, or (*ἐπαύλια*) when she took up her abode in his home. But if the wife died without children, these presents returned to the husband. (Kœnigswärter, *Etudes Historiques*, p. 24.)

A century or two saw the transition from this system of dower to the system of dowry. Men sought for their daughters the pick of available husbands, and for themselves the strength which alliance with wealth and position can give, so that Isaeus speaks of it as a custom inflexibly established at Athens by the time of the Peloponnesian war, and declares that no decent man would give a legitimate daughter less than one-tenth of his property. (Jones's *Works*, vol. iv., p. 205.) But indeed the custom was beginning to grow oppressive before that time; for according to Plutarch, Solon legislated against the new and burdensome system of dowry for brides.

Among the Dorian races, we have no record of the earliest transition from the payment of a bride-price, common in the

heroic times; Müller says (*Doric Races*, ii., 208), "We know with certainty that daughters had originally no dowry, and were married with a gift of clothes. Afterwards, however, they were at least provided with money and other moveable property." At a later date, the bridal portion became a somewhat burdensome institution.

Precisely the same change occurred at Rome. It is clear that the early sale of the bride, which was a real transfer of property, declined until it was only a symbolic sale, and a fictitious transfer. Not that the wife any the less in the eyes of the law became the property of her husband, but what the law supposed, and what the feelings and ideas of the people caused them to practise, were very different things. And yet this legal view of the matter might have been the reason why there seems to be no trace of dower, no sign that the husband ever paid the marriage price to the bride herself. Wherein could be the utility of such a gift when in law the woman herself and all she had, completely passed into the possession of her husband? But the custom whereby the father gave his daughter a dowry crept steadily onward, and Legouvé says that in the annual pretorian edicts there is to be seen a successive development of the idea that a dowry should go with a bride in order to make the marriage a respectable ceremony. (*Hist. Morale des Femmes*, p. 122.)

Hence the usages of Rome, as they stood in the beginning of our era, required that the bride should receive from her father (*Dos profectitia*) or from a relative (*Dos adventitia*) some contribution towards the establishment of the new home. "The sum would depend upon the station and means of the parties, but something was considered indispensable." (Ramsay, *Roman Antiquities*, p. 253.) If the husband died, the dowry belonged to the wife, but if the wife died childless, while yet her father was living, it returned to him; the idea apparently being that the alliance which he had purchased for his daughter having failed, he was entitled to the return of the payment he had made. If the wife left children, one-fifth of her dowry was retained by the husband for each child. If a divorce took place by reason of grave misconduct on the part of the wife, she forfeited her whole dowry; but for less misbehaviour a

portion only could be retained by the husband. If the husband chose to divorce his wife without proof of reasonable cause, he had to refund the whole dowry.

But nowhere is the transition half so clearly seen as in the case of our Teutonic ancestors, for their primitive condition had the rare combination of being synchronous with writing, imported no doubt from abroad, but none the less invaluable as giving us authentic records of the manners of a race when passing through the transition from barbarism to civilisation.

The editor of the *Anciennes Lois des Français* declares that "the history of marriage in early German law is the story of its gradual enfranchisement from the forms of a sale, and the substitution of other forms more consistent with its ethical character". A study of the Germanic codes of the early middle ages shows that as the barbarian entered the stage of civilisation, a father made it a point of honour to decline the price which by usage ought to be paid him by the bridegroom. Yet the bridegroom on the other hand must have felt it to be a meanness to sneak out of the customary payment because of the generous feeling of his father-in-law. If the bridegroom insisted upon proffering it, and the father upon refusing it, the money would assuredly be given to the damsel herself. It became then the custom for the bridegroom at betrothal to pay a certain sum for the first kiss, and on the morning after the wedding a certain further sum, the acknowledgment that then for the first time the bride had left the virgin state. The former was technically known as the kiss (oscle) and the other as the morning-gift (morgengabe). There seems to have been a little of the bargaining spirit mingled with the gallantry underlying these altered customs, for a widow on her second marriage was not entitled to the morning-gift, having lost no maiden state for which compensation might be given; yet the more gallant side of the question is clearly seen in the laws of the Longobardi, who seem to think it needful to assign limits to the increasingly extravagant amount of the morning-gift. It was not to exceed a quarter of the bridegroom's total property. (Lindenbrog, book ii., tit. 4.) Kœnigswärter has collected a body of

details from these barbarian laws, showing how they exemplify "the bride-price, the morning-gift, and the dowry as the three successive phases in the emancipation of woman".

The Scandinavian had precisely the same course of progress. First is the sale of the woman. The father, the brother, or, in the case of a widow with a grown-up family, the eldest son, had the right to sell her, and if she had children by any man who had not paid for her, these were regarded as bastards and intruders. In the seventh and eighth centuries of our era we find that the price is given to the woman herself; and then arises the necessity of limiting the amount thus made over to the bride in the warmth of his wedding enthusiasm by the enamoured bridegroom. The limitation became necessary for various reasons, chief among which was the fact that there could be no witness to the compact made as to the morning-gift. Hence if at a subsequent date the husband died, the testimony of the widow was all that could substantiate the reality of the claim she made. She was by the law of early mediæval Europe allowed to place her hand upon her heart and swear that the morning-gift assigned to her by her dead husband had amounted to so much. There was no appeal from that oath. (*Legouvé*, p. 120.) Unscrupulous women would from time to time swear to the whole or greater part of the property, which, though a fair enough destination of her husband's belongings according to our ideas, was far in advance of these times; and therefore the laws expressly set limits to what a woman could claim. The evident outcome of this would be a system of jointure, for the bride would be little satisfied with the husband at her side on the bridal morning if he assigned her less than that fourth part which the law allowed; and if he were surly enough even then to refuse it, she would always in case of his death be able to maintain her right by a little false swearing, which under the circumstances would seem fairly excusable to those rarely scrupulous ages.

Among our Anglo-Saxon progenitors there was exactly the same succession. First the sale: the laws of Ethelbert are clear as to that point; for instance, law 76 says, "if a man buy a wife, let the price be paid". This would be about

the middle of the sixth century. Four centuries later the laws of Edmund the Elder witness to a great change for the better; not only is it enacted that the free consent of the bride is absolutely necessary in every marriage, but the intending bridegroom is obliged at his betrothal to fix the amount which he will give his bride as a morning-gift (morgen-gifu) on the day after his wedding. Nay, more, the custom of dower is progressing, for he must also state what proportion of his property he will settle on his wife to be hers if he die before her. Lappenberg says (ii., 338) that the purchase money given to the father of the bride was at first the all-important item of the wedding ceremony; but that "afterwards the morning-gift to the bride herself grew into an object of greater importance, while the purchase price became either a symbol, or was left to the goodwill of the bridegroom".

We trace the same stages among the Celtic peoples. In the earliest times the Welsh bought their wives, but in the laws of Howell (900 A.D.), as Woodward relates (*History of Wales*, p. 185), it is provided that, the morning after her wedding, the bride, before she leaves her bed, must demand of the bridegroom the fee of her virginity, and he was bound either to give it, or to declare what it would be. But if the couple separated within seven years, he was entitled to receive back the payment he then made. The Celts of Gaul had reached a decidedly later stage ten centuries earlier; for in Cæsar's time it is clear that the purchase money paid by the bridegroom was equalled by a present made to the bride by her father; the united sum became the dower of the bride, to be her own absolute property if she chanced to be left a widow, but passing into the possession of her husband if she died before him. (Cæsar, vi., 19.)

By a singular coincidence, I possess Kœnigswärter's own copy of his *Etudes Historiques*, which is interleaved throughout and profusely annotated and enriched with additions for a second edition which he never published. In one of his manuscript notes he says, "A crowd of usages prove the ancient purchase of wives among the French; but the price, which had originally been serious, became merely symbolic, a penny,

a white sheep, a basket of flowers; or a bouquet was offered, and it is more than probable that the nuptial flowers so generally presented in French weddings draw their origin from this ancient symbol of purchase".

Westermarck quotes the *Ancient Laws of Ireland* (i., 155; iv., 63) to show that, among the Irish, part of the bride-price went to the father of the bride, or, if he were dead, to the head of the tribe, but another portion was given by the bridegroom to his wife after their marriage. Ranke says that in Servia, even so late as the beginning of the nineteenth century, it was incumbent on the bridegroom to bring a costly present; and that the bride's father was expected to bring as much, the whole going to form the dower of the bride, a custom distinctly redolent of the once prevailing purchase system, softened by the lapse of time. (*Servia*, p. 37.)

The Christian Church in mediæval times took up the process of amelioration at the point wherein the morning-gift had displaced the then forgotten purchase money. It became the strenuous champion of the emancipation of woman, and in proportion as it strove to alter the marriage ceremony from a customary to a religious institution, it asserted and made good its claim to interfere in all the wedding arrangements. It absolutely repudiated any form of purchase, and maintained with all the thunder of excommunication and superstitious fear, that marriage was the union of immortal souls, which only the Divine presence and sanction could ratify. How this Christian ideal arose and gathered its strength, I shall briefly consider towards the close of this chapter. Here I am concerned only with its effects upon the already half-effected transition of purchase money into dower. It gave no countenance to the heathen practice by which the bride, still in her bridal bed, coaxed her husband to make her an ample morning-gift. All had to be done under the eyes of the Church; but mundane questions of property must not be brought to the holy altar itself, and hence arose the custom whereby, at the church door, the bridegroom, in the presence of the wedding guests, declared the provision which he made for his bride, a provision which was necessarily inoperative unless she became a widow, when she could claim as her dower whatever property had

been mentioned. It was a system that only gave method and publicity to the more ancient custom of the morning-gift, but it had immense advantages, even in its publicity and method. Moreover, the priest was there as an arbiter to see that justice was done, and it must constantly have happened that he refused to proceed with the marriage ceremony till he had heard the promise of some adequate provision undertaken in case the wife should become a widow.

Sir Henry Maine truly says (*Ancient Law*, p. 224) that the Church "never relaxed its solicitude for the interests of wives who survived their husbands, winning, perhaps, one of the most arduous of its triumphs, when, after exacting for two or three centuries an express promise from the husband at marriage to endow his wife, it at length succeeded in engrafting the principle of dower on the customary law of all Western Europe". By degrees this provision for the widow became a more and more sacred thing. Even the condemned criminal or traitor, who in the earliest times forfeited all he had to the sovereign, was made participator in its beneficent intentions. For the law was so altered that, while all else he had was confiscated, the wife's dower was safe to her even against the most royal rapacity. (Pike's *History of Crime in England*, i., 428.) When this stage was reached, no longer was the cruel spectacle beheld of widows becoming the property of their husbands' nearest male relatives, or of their own sons, to be sold as it seemed good to these. Many a woman was seen in the proud position of the head of a family holding in her own right a large estate and dwelling in her own castle. Or, it might be, the citizen's widow, owner of the house she dwelt in, could draw the profits of the business left her by her husband. We shall have reason to see very shortly how grudgingly men permitted the change, and with how many limitations it was at first fettered. Truly human progress has been slow and hardly won; never the work of a single triumphant generation, but moving with a creep so invisible that only by the comparison of periods many centuries apart can we see any sign of its glacier-like advance.

Woman Acquires a Status.

It was of course inevitable that along with the transition from the purchase of the wife, to the wholly opposite custom of investing her with property, there should grow up a very different estimate of woman. In consequence we find that concomitantly with this change, woman began to acquire a status. In savage and barbarian life she has none; whatever influence she may have is not of right but only of favour, not secured to her by law or custom or any sense of justice, but only by the indulgence, the condescension, the affectionate good-humour of her husband or other owner. But within the stage of civilisation, the woman slowly acquires a status; she is no longer dependent for everything on the autocratic nod of her lord and master. She has rights, and the general sense of the community will assist her in maintaining them.

It would be useless, and tedious, to describe all the channels of history wherein the progress of woman's status is visible, but I shall offer three as typical of all. I shall describe the decay of the power which the husband possessed (1) of slaying, (2) of chastising, or (3) of divorcing his wife at his pleasure. A glance at the laws of the inheritance of property in so far as it affects females will conclude a sketch that must be necessarily brief, and can have no other merit than that of suggestiveness.

Though the savage possesses the full right of superior might, and may kill the wife whom he has bought to be his property whenever and however he pleases, it is a right but rarely exercised. The woman bred to dependence and obedience from the beginning secures her safety by absolute and servile obedience, and as man is at no grade an absolute monster, his affection and self-interest will combine to secure her. Generally also some little play of public opinion occurs to temper his furies. Curr states that, even among the Australian natives, the execration, the disapproval of the tribe, sometimes the active intervention of her friends will deter a man from actually spearing his wife to death, though no one will be likely to interfere with him if he merely beats her.

Yet in some savage races the right of beating a wife disappears before that of putting her to death; just as we might say to a man whom we saw ill-treating a dog: "Kill the poor animal if you do not want it, but at least refrain from the cruelty of constantly kicking and cudgelling it". So it often happens in a savage community that the members of it object to hear the yells and sobs of a woman under the frequent abuse of a brutal husband. Their feeling seems to be that, if he has anything serious to complain of, he should kill her or send her away; but the tribe refuses to have its feelings harrowed and its rest disturbed by continual barbarity. Colonel McKee, in his journal of an expedition among the Californian Indians (printed in Schoolcraft, iii., 127), speaks of this manner of sentiment when he says: "One of the whites here in breaking in his squaw to her household duties had occasion to beat her several times. She complained of this to her tribe, and they informed him that he must not do so; if he was dissatisfied let him kill her and get another." The same writer says that "the men allow themselves always the privilege of shooting any woman they are tired of".

In all savage races the husband exercises such summary justice or injustice as he pleases. The wife who has exasperated him has her nose slit, her leg speared, her head pounded with a club, sometimes her throat cut; sometimes the prevailing fashion is to bind the poor creature hand and foot, then toss her into a river. These horrid practices are within the power of the man, though not often exercised. The custom of buying wives, most prevalent in the barbarian stage, renders the wife no more her husband's property than she already was at the savage stage, but by giving her a market value secures her a safer position, just as among ourselves the dog which has cost much money is more certain of good treatment than the one which has strayed into our possession. The barbarian may still slay his wife when he pleases, but in proportion as such a tragedy becomes rare, so does it strongly affect the general sentiment of the community, and the man who incurs the detestation of his neighbours for such an act, becomes a warning to others against rash severity. It is easy to understand, therefore, how customs

of various sorts grow up which, while nominally allowing the husband the power of life and death, must practically limit it to a large extent. For instance there are races in which it very commonly occurs that, when a husband is dissatisfied with his wife's conduct, he calls her relatives together, or perhaps the chief men of the tribe or village; he explains his grievances, and they inquire into her conduct; but if their sentence is death, none but the husband himself has the right to inflict it. She is his property; he has of his own free will, and to keep himself right in the eyes of his people, called in outsiders to judge between himself and her; but his alone is the power of life and death. This is a stage fully reached by the middle barbarians; among the upper barbarians it has attained to such a degree of prescriptiveness that no man would dare to kill his wife without the preliminary inquiry, and when that is the case there is a great tendency for the right of executing judgment to pass out of the hands of the individual and become a tribal matter.

Thus we find in the patriarchal times of the Jews that the husband or nearest male relative has absolute right of life and death over the woman. But after the return from Egypt it is plain that this power is steadily merging in the community. The unfaithful wife is still to be put to death at the husband's instance, but the execution is by stoning at the hands of the people. This death penalty for the unchastity of woman belongs to the latest grade of barbarian life, and it declined among the Jews until, as we see in the Gospel according to John, it had become obsolete in practice, though still standing in the law.

Even in the Mosaic law some little sign of mitigation is evident, for while the wife is to be put to death, the concubine is only to be scourged for want of chastity. Yet the old personal jurisdiction of the husband is very clearly seen in regard to divorce; for this lay wholly in his own hands and at his own pleasure. Under no circumstances whatever could a wife obtain a divorce, but the husband might dismiss her merely out of whim or sudden suspicion. "When a man hath taken a wife, and married her, and it hath come to pass that she find no favour in his eyes, because he hath found

some uncleanness in her, then let him write her a bill of divorcement, and give it in her hand and send her out of his house." (Deut. xxiv. 1.) And this remained the law among the Jews for 2000 years. Not until A.D. 600 did they assimilate their customs to the more merciful sentiments then prevailing among their Mohammedan neighbours. Then for the first time the Jewish woman had a right to secure a separation from a husband whom she could prove to have treated her cruelly. (Graetz, *Hist. of the Jews*, iii., 94.) Not till A.D. 1000, however, was there imposed any check upon the husband's right to divorce his wife at his own pleasure.

But on the whole the books of the Old Testament show successive improvements in the position of women, and the pictures of good wives in the Book of Proverbs and in the later prophets indicate that their lives were secured to them, that they were free from personal violence, and that they held the position of cherished companions to their husbands, with a full measure not only of household authority but of external influence. If the wife were childless, she ran much risk of being divorced, when her position, at a time wherein woman's chance of earning for herself was poor, must have been very pitiable. But if she were the mother of a family, especially of sons, her position was one of honour, though characterised by utter want of education, and by a legal and social inferiority which was only partly softened and sweetened by the play of natural affections.

The Arabs formerly had the power of putting their wives to death. The whole tenor of the "Thousand and One Nights' Entertainments" is clear upon that point. It is said that some of the Egyptian Arabs have not long abandoned this marital jurisdiction. Mahomet, in the first form of the Koran, provided for the stoning of all adulteresses (Sale's *Koran*, "Prelim. Discourse," p. 48), the form of the enactment being apparently derived from the Mosaic legislation. But by that time it was at variance with the trend of public sympathies, and before the prophet's death the verse was quietly dropped out, the new regulations which were elsewhere introduced (Koran, chap. iv.) providing that if four witnesses could be brought to prove adultery against a woman of respectable position, she

was to be shut up in a separate room until either her husband should relent, or she should die in ordinary course. Here it is plain that the natural jurisdiction is supposed to belong to the husband; and, indeed, with regard to personal chastisement, the Koran is quite explicit. In chapter iv. we read: "Those (wives) of whose perverseness ye shall be apprehensive, ye must rebuke, or remove them into separate apartments and chastise them".

But the Mohammedan law assuredly exhibited a certain progress in the position of women. It copied from the Mosaic law the principle that a husband might repudiate his wife for the slightest disgust, but it allowed the wife the right of divorce "for ill-usage, for want of suitable maintenance, or for neglect of conjugal duties". (Sale's *Koran*, "Prelim. Discourse," p. 96.) And then she had important rights of dower: "Your wives shall have the fourth part of what ye shall leave if ye have no issue, but if ye shall have issue, then let them have an eighth part of what ye shall leave after the legacies are paid". The daughter always shares her father's, as well as her deceased brother's estate, and husbands are warned to deal fairly with all property thus acquired by their wives. If a man divorces his wife, unless he can prove against her great immodesty or notorious disobedience, he must restore to her the dowry her father gave her, and all her inherited property; but if she secure a divorce against him, whatever be her just ground of complaint, it is very rare that she can recover her dowry. And yet during many centuries past, the Mohammedans have been better than their law, for they "are seldom known to proceed to the extremity of a divorce, notwithstanding the liberty given them, it being reckoned a great disgrace to do so". (Sale's *Koran*, "Prelim. Discourse," p. 96.)

Even the right to thrash a wife, though so explicitly laid down in the Koran, has yielded to the silent flow of the tide of sympathy. It is rarely exercised by people of any respectability in Mohammedan countries. Thus in Afghanistan, though the right is admittedly a legal one, no man of any self-respect would strike a woman; if he did, it would be reckoned an indelible disgrace. (Perrin, *L'Afghanistan*, p. 81.)

Polygamy itself, which is always a symptom of incomplete conjugal affection, is steadily yielding to the same growth of sympathy, and in general the position of women in lands that are under the control of Islam is extremely characteristic of the lower and middle civilisation. It is very much like that which Rohlf asserts of the women in Morocco (p. 42), that on the one hand the wives are never badly treated; that they are rarely set to do the hard bodily labour; and that they exercise much influence over their husbands; but that on the other hand the men have an overwhelming sense of their own superior cleverness and importance; the females are rarely taught to read; and their place is in the background, wherein, if they modestly content themselves, the males as a rule show them much condescending kindness.

The Chinese, who are at the same stage of progress, treat their women in similar fashion. Dr. Williams says (*The Middle Kingdom*, ii., 238) that the position of woman, legal, social, domestic, is fairly high, even though she is kept quite uneducated, very few ladies even of high rank being able to read. In the book of rites it is prescribed that after the age of ten a girl ought not to go out of her father's house till she is married. Even then her father should bring a palanquin to the door; she should step into it, and the door should be locked, the key being taken to the bridegroom, who alone has the right to unlock the palanquin at the door of his own house. (Martin's *China*, i., 39.) And yet Dr. Coltman, who, as a practising physician among the Chinese, saw for long years their inmost domestic life, declares that women have no little influence, and he describes amusing cases in which wives successfully defied their husbands to bring concubines into their houses. (*The Chinese*, p. 99.)

It is impossible for the wife to obtain a divorce from her husband on any plea, but the husband can divorce her without difficulty. Nothing is needed but the formal expression in writing of his will that she should depart; and yet divorce is extremely rare. (Doolittle, i., 107.) A man has in law the right to kill a faithless wife if caught in the act, but he must kill her paramour also. Yet in modern times the practice and the law are at variance, husbands being condemned by public

opinion for any such act of violence. It is doubtful, however, whether the new system is at all times an improvement, for Archdeacon Gray tells us (*China*, i., 227) that a really faithless wife is sold by her husband, and as a rule he receives the best price from the keeper of some house of vice.

The early Chinese precepts required a woman to be submissive first to her father, then to her husband, lastly to her son; but it is one of the benefits of Confucianism that it has destroyed the last form of bondage; for the great philosopher taught the extreme beauty of filial devotion, and in the deep respect which is due from the son to his parents, the mother is treated as of equal honour with the father. R. K. Douglas, in his little work on Confucianism and Taouism, thus sums up the position of the Chinese woman (p. 124): "A slavish submission is a woman's highest duty; it is only when she becomes a mother that she receives the respect which is due to her, and then the inferiority of her sex disappears before the requirements of filial love, which are the crown and glory of China. For conjugal fidelity on the part of the husband Confucius has no overweening respect, but it is the interest as well as the duty of the wife to pay him due reverence in all things, to be courteous, humble, and conciliatory. It is regarded as a matter of course that the husband of a childless wife should take a concubine, a practice which is a fruitful source of great misery." The same views are exemplified in his chapter on Marriage in his work on *Society in China*. According to Doolittle (i., 27), husband and wife generally eat at the same table together, as do also the adult children. But if guests happen to be present, the women must retire into the inner apartments.

In Japan the position of women a generation ago was somewhat of the same kind, though they were undoubtedly rather less subservient, and the men were more gallant towards their women than was customary in China. Miss Bird quotes from old precepts (*Unbeaten Tracks in Japan*, p. 323) that "the wife has no lord or master but her husband; therefore she must do his bidding and not repine. A wife must not be jealous if her husband be unfaithful to her; she shall always keep to her duty, rise early and work till late at

night." Steinmetz says (*Japan and her People*, p. 253) that the women "are subject to no seclusion; they hold a fair station in society, and share in all the innocent recreations of fathers and husbands, the fidelity of the wife and the purity of the maid being generally left to their own honour. Yet women are in a state of tutelage, and without legal rights; their evidence is inadmissible in a court of justice. A husband may introduce as many concubines as he pleases, and women so introduced are not regarded as dishonoured. A man may divorce his wife at his pleasure, but, unless he can show good cause for dissatisfaction, he must support her for the rest of her life."

A Japanese woman could never on any pretext obtain a divorce, and no sort of obloquy attached itself to the incontinence of the men, which was general and continuous. It is a well-known fact that the Government of Japan kept in its own employment something like 20,000 courtesans. These girls were bought from their parents at the age of seven or eight years, and trained to the accomplishments most appreciated in Japan. They entered on their career of ministering to lascivious pleasures at the age of about fourteen, and remained at it until twenty-four, when the Government, which had meanwhile supported them and made a profit from them, gave them a sum of money and discharged them. It was open for one of these girls at any time to marry if the bridegroom compensated the Government for the loss of her services.

These courtesans were divided into four classes, and resided in special districts, two parts of Tokio being reserved for them. Of these the most fashionable was Sinagawas, to which the wealthy citizen repaired in the afternoon with his wife and family to be entertained. As the evening grew late, it was the general custom for the husband to send home the family, while he remained to indulge in the more immoral pleasures to which the night was devoted. (Laurence Oliphant, *China and Japan*, ii., 494.) Sir Henry Loch corroborates these details, and the Rev. Gray Dixon (*Land of the Morning Sun*, p. 474) rather intensifies the picture. He says that the real state of morality of married women in Japan is not easily

discovered, but with the men there is no pretence of morality in our sense. Courtesans used to form large districts under Government management, and the wife had more the appearance of a housekeeper than a true partner. Concubinage everywhere prevailed. This last writer tells me that in many country hotels there is inserted in the scale of charges affixed to the doors the price for a female companion to be provided by the landlord, if required. I gather from the narratives of several missionaries that an analogous custom exists in several parts of China.

Thus we are prepared to some extent to agree with Henry Norman when he tells us (*The Real Japan*, p. 180) that "the love which comes of a perfect intimacy and mutual knowledge can rarely be between man and wife". The assertion is probably too strong, for the fundamental affections of human nature must exist in Japan as elsewhere, and many circumstances indicate that great conjugal tenderness, though not the sweetest, may dwell alongside of much male unchastity. Norman himself tells us (p. 174) that the women are treated well; and that they are singularly characterised by "an inborn gentleness, tenderness, and sympathy". For 100 days after her confinement a mother is nursed as an invalid, with every sort of care poured lavishly upon her. Girls receive the same education as boys, even the humblest being taught to read and write. (Steinmetz, p. 262.) All visitors to Japan are struck by the pleasing address of the men, and the natural civility which they show to all. Women are characterised throughout their lives by a school-girl happiness; a smile is ever ready, a ripple of laughter runs through all their days. If their status is inferior they desire no other; just as a girl of ten among ourselves feels it nowise irksome to be dependent, and contentedly fills her life with the rosy happiness of irresponsibility.

In Siam the position of the women is equally happy, though considerably lower in legal status. Miss Cort tells us (*Siam*, p. 168) that "they are never educated, all the schools being filled only with boys; yet they are happy, bright and winning; they have plenty of influence, yet are made to understand their complete inferiority to men". Karl Bock

says (*Temples and Elephants*, p. 186) that the "Siamese wife takes rank with her husband, and has all the management of the household. The women in Lao, as well as in Siam, exercise a good deal of authority. But of education there is none for the female sex and little more for the other." Miss Cort asserts (p. 200) that the husband can divorce his wife whenever he pleases, and that neither the law nor the moral sentiment of the people interferes with his right to turn his wife out if it suits him to do so.

In Burmah the position of women is analogous. Lieut.-General Fytche assures us (*Burmah*, ii., 71) that "woman is there not the mere slave of passion, but has equal rights, and is the recognised and duly honoured helpmate of man. A Burmese seldom does anything without first consulting his wife. Women are generally married about seventeen to nineteen years of age to the man of their choice, the parents very seldom interfering, more than to advise. A wife can demand a divorce for ill-treatment if her husband cannot properly maintain her. He can obtain a divorce for barrenness or infidelity. Serious quarrels however are rare, polygamy very uncommon, and the observer cannot but be struck with the contentment, happiness, good-humour, courtesy, and well-bred freedom of their manners."

Effects of Various Religions.

The main factor in securing this greater security, this kindlier consideration and truer companionship for women has been the steady growth of human sympathy, which has placed a beneficent restraint on the rule of superior strength. But the reign of sympathy has been immensely favoured where it has been methodised and emphasised in religious form; for if the founder of a religion is an enthusiastic preacher of humanity, if his soul is filled with tenderness and pity, if he can add to the charm which people see in gentleness and compassion, all the terrors of future penalties for cruelty and oppression, then he may do much to make the highest ideal of his time become more rapidly current among the generality.

Four religions have notably assisted in this process: the Egyptian, the Zoroastrian, but more especially the Buddhist and the Christian. The Egyptian was the first religious system known to us into which sympathy (or love as it is so often called) entered as a distinctive element. As Tiele says (*History of Egyptian Religion*, p. 226), "Some of its maxims are very beautiful, inculcating pity and loving-kindness, mildness, chastity, the protection of the weak and a kindly disposition towards inferiors". He quotes the eulogy of a nobleman described as being "faithful to his mother, zealous for his mistress, sweet of speech and courteous towards great and small. His love was the food of the poor, the blessing of the weak, and the riches of him who had nothing."

The consequences of a teaching so sympathetic, whenever it became influential, must have been to improve the position of women; and so we find at a very early date a comparatively high female status in Egypt. Sir J. G. Wilkinson asserts (*Ancient Egyptians*, i., 4) that "in the treatment of women they seem to have been very far advanced. It was not a mere influence which they possessed. It was a right acknowledged by law both in private and public life." He describes the great mutual affection of wedded couples, and notices the terms of endearment which on the monumental sculptures they use to each other as well as to their children. "In short," he concludes, "they were the most Darby and Joan people possible, and they shared the same chair at home, at a party, and even in their tomb where sculpture grouped them together" (p. 145).

Diodorus (i., 80) asserts that polygamy, except among the priests, was common in Egypt, but Herodotus is very explicit (ii., 92) in declaring that monogamy was the rule. Both may be right; for Diodorus, though the later writer, was describing very ancient conditions, while Herodotus, though the earlier, was describing what he saw; it is no way unnatural therefore to suppose that religion may have introduced the custom of monogamy among the priests, and that it may have slowly spread even to the highest of the laity, while among the common people it was of course bound to be the general rule.

But all authorities are agreed that the Egyptians had

concubines, always either bought or captured. Yet Ebers says (*Egypt and the Books of Moses*, i., 307) that "wives lived as honoured ladies of the house, and enjoyed a free intercourse, being allowed to appear in public, and at social gatherings. In the higher ranks, especially, the mutual tenderness of married couples ended only with their lives. Adultery was one of the forty-two capital sins, and it is worth noticing that the husband as well as the wife had to declare his innocence of it when passing the judges of the lower world." Wilkinson says (ii., 210) that a woman convicted of adultery lost her nose, while her paramour was castigated or castrated.

On a somewhat equal level was the ideal of woman in the early cradle of the Aryan races; in the sacred book of Zarathushtra, the young couple at marriage are thus addressed (*Gathas*, liii., 5), "In piety you shall both seek to win the love of each other, only thus will you be led to joy". Sir J. Malcolm declares with justice that from the earliest times of their known history they were monogamous, and that their manners were softened by a certain spirit of chivalry. Professor Geiger thinks that in the primitive Avesta people polygamy was not forbidden (ii., 69), but he agrees (i., 53) that in the old Iranian home the wife was the house-mistress, the companion in all things of her husband. "At marriage the bridegroom demanded that the purity of the bride should be unstained; after her marriage the wife was to be obedient, but by no means slavish." Rawlinson also says in his *Ancient Monarchies* (iii., 76) that "the Aryan races seem in old times to have treated their women with a certain chivalry which allowed them the full development of their physical powers". In the Visparad, we find that all respectable women are summoned to partake of the sacred meal prepared for the spirits (Haug's *Parsis*, p. 193); and in the Vendidad, it is said that when a youth after his fifteenth year frequents the house of a courtesan, then at the fourth step as he departs from her, the evil demons take possession of his tongue and of his marrow, and proceed to destroy all the goodness that was in him. (Haug, p. 249.) Abortion is one of the deadliest sins. Nevertheless we know from history (Herodotus, i., 135; v., 18; and

Strabo, xv., 3) that when the Persians were first known to the Greeks, concubines were freely taken by the men.

The teachings of the Zoroastrian religion run into those of Brahminism, in the sacred books of which we find much more explicit statements as to the early status of women among Aryan peoples. They indicate that combination of legal inferiority with practical kindliness of treatment which is characteristic of civilisation in its middle stages. The ordinances of Manu, enjoin (v., 148) that "in her childhood a girl should be under the will of her father; in her youth under that of her husband; in her widowhood under that of her sons; a woman ought never to enjoy her own will, but him to whom her father gives her, she must obey while he lives, and when he is dead she must not disregard him". And yet we read (iii., 55), "Women are to be honoured and adorned by their fathers and brothers and by their husbands. Where women are honoured, there the gods rejoice. Where women grieve, that family quickly perishes. In whatever family the husband is pleased by the wife, and so also the wife by the husband, truly prosperity therein is ever firm."

Manu provides that husbands may administer corporal punishment to their wives. "If your wife, son, slave, pupil, or younger brother commit a fault, beat them with a cord or with a bamboo cane, but only on the back of the body" (viii., 299). The husband is not allowed the liberty of divorcing his wife at pleasure; on the contrary, there is to be "mutual fidelity ending in death alone" (ix., 101). But while the unchastity of the wife is to meet a fearful penalty, that of the husband is regarded as venial. "If a woman should prove false to her husband, the king should have her devoured by dogs in some much-frequented place." The paramour who seduces the wife, and so interferes with the husband's rights, is heavily punished—"burned on a glowing hot iron couch until consumed" (viii., 372). But a small fine is all that punishes the man who gratifies himself with wandering women, actresses, and servant girls. If he deflower an unwilling maiden, he is to receive corporal punishment, but if the girl consent a small fine is inflicted. This infidelity on the husband's part is not to be resented by the wife. "Though

of bad conduct or debauched, or even devoid of good qualities, a husband must always be served like a god by a good wife" (v., 154). And yet the man may divorce his wife "if he find her blameworthy, sickly or corrupt" (ix., 72).

But Buddhism, as the first religion in which the law of sympathy was made supreme, effected much in promoting the elevation of women from this standard which was only moderately high. Bishop Bigandet, in his *Life of Gaudama* (ii., 33, footnote), says that "the comprehensiveness of Buddhism, its tendency to bring all men to the same level and allow of no difference save that of superior virtue, all these have mightily worked in elevating the character of woman. Hence in those countries where Buddhism has struck a deep root, the condition of the women has been much improved, and placed on a footing far superior to what she occupies in those countries where that system is not the prevalent one." Rhys Davids, in a footnote to his *Buddhist Birth Stories* (p. 204), declares that it is a "striking proof of the high estimate in which women were held among the early Buddhists that they are several times declared to have reached the highest stage of spiritual excellence, rarely reached by any one".

Without exception, those religions which have the feeling of humanity, and a deep sentiment of sympathy as their foundation, have proceeded from an elevated estimate of woman to an appreciation of male purity. For as the duty of the woman to be chaste has been established in previous stages, as she suffers degradation by the loss of purity, the man of right feeling will hold it a cruel and dishonourable thing to seduce her. This tendency co-operates with the sentiment of conjugal sympathy and other less efficient causes to form a sense of purity in men which then for the first time appears. In the ordinances of Manu (ix., 50-52, 59, 146) a very worldly and rather sordid view is taken of chastity in men. But the teachings of Gaudama, the Buddha, constantly reiterate, "Beware of the passions and particularly of concupiscence". Bishop Bigandet (*Life of Buddha*, ii., 50) says that the great teacher "desired to maintain the members of his assembly in a state of spotless purity". He went no doubt to a mystical extreme, an extreme to which the good bishop,

as a Roman Catholic, is quite willing to follow him; but to us it seems as if Buddha overshot the mark when he forbade the inmates of his monasteries so much as to look upon a woman. "By conversing with women, one becomes acquainted with them; acquaintance begets familiarity, kindles passion, leads to the loss of virtue, and precipitates into the four states of punishment. It is, therefore, most prudent not to have any conversation with them." But if a monk requires to speak to a woman "let him consider as mothers those who are old enough to be mothers; as elder sisters those who appear a little older than he; as younger sisters or children those that are younger than he".

Buddha strained his point much too far, no doubt, when he insisted on the celibacy in addition to the unbroken virtue of the professed members of his community; and the greatest of all qualifications in the Buddhist eye was the triumph of a life of absolute repression of all sexual instincts. The Udana-varga, containing the record of early Buddhist morality, insists in the loftiest way on the fundamental beauty of purity. "The pure man knows not death, he who is impure dwells with death" (iv., 1). "Morality brings happiness; the body is free from pain; at night one's rest is peaceful and on awaking one is still happy" (vi., 3). "He who is virtuous in body, speech, and mind obtains increasing happiness here and in the other world." "They who give themselves up to lust-fulness run after old age and death, as does the calf after its mother when longing for milk" (iii., 4). In short, throughout Gaudama's teaching, the obligation of chastity is laid on men even as upon women.

The Tutelage of Women.

But on the whole the Buddhist and Brahmin represent in modern times only the Aryan ideal seen of old in early Greece and Rome. Grote tells us (i., 475) that in Greek legend and poetry a certain reverence attaches to women. Duruy agrees with this opinion, but hazards the risky assertion that "love in our sense of the word was wanting," which is true only if

it means that the sensuous side of the sexual relations still outweighed the sympathetic. The woman was bound to chastity, while for man there was no such obligation. At Athens in her most polished time, a woman could not possess property, nor yet be heiress to her own father. If a man died leaving an estate and an only daughter, the nearest male heir took them both together, the girl having no legal right to refuse.

A woman was married at the age of fifteen or sixteen, and then retired into the strict seclusion of the women's apartments. She rarely went abroad, was never seen at theatres, at games or at feasts, and even in her own house was not allowed to sit at meals with her husband if male guest were present. (Lecky, *European Morals*, ii., 287.) Sir George Cox says (*General History of Greece*, p. 486), "Behind a dark and almost impenetrable veil are hidden the wives, the sisters, and the daughters of the men whose names are familiar words in Grecian history". "And yet," says Lecky, "in their own restricted sphere, their lives were probably not unhappy. Education and custom rendered the purely domestic life a second nature, and it must have, in most instances, reconciled them to the extra-matrimonial connections in which their husbands too frequently indulged. The prevailing manners were gentle, and domestic oppression is scarcely ever spoken of; a feeling of warm affection, though not of equality, must doubtless in most cases have spontaneously arisen." (*Morals*, ii., 288.)

Aristotle contrasts the honourable position of the Greek wife with the slave-like dependence of women in the barbarian races. His picture of a good wife vividly realises for us an improving, though far from perfect ideal. "A good and perfect wife ought to be mistress of everything within the house, and she should manage the expenses laid out upon such festivals as her husband has agreed with her to keep. Nothing contributes so much to the commendation of a woman, as good management in domestic affairs, and a noble and comely manner of life. She ought to show herself a fellow-counsellor to her husband, so as to assent to what pleases him; she ought to be obedient to her husband and

should consider his behaviour as a model of her own life and a law to her. Observing such rules as these, the wife ought to show herself even more obedient to the rein than if she had entered the house as a purchased slave. For she has been bought at a high price for the sake of sharing life and bearing children, than which no higher or holier tie can exist." (*Economics*, i., 7.) We have already seen that, while male chastity was never dreamt of as in itself a virtue, Aristotle recommends the wisdom of it to a married man by reason of the great domestic felicity it encourages, teaching that the best of happiness was to be derived from a true and single affection for a good wife.

In both Greece and Rome the letter of old laws remained nominally in force long after growing sympathy had introduced new views and new customs which practically abrogated these laws. At Rome, for instance, the wife was by law the absolute property of her husband, who had the legal right to kill her, thrash her, divorce her as he pleased. But time and pressure of public opinion practically took from him all these rights; and the ancient Roman matron who suckled her infants and spun her wool in the carefully secluded background gave place to wives who found a pleasure in literary culture, who loved to shine in society, and who moved in a free and cheerful life, which had often a tendency, where wealth abounded, to become unlicensed, and to present that odious mixture, a barbarian groundwork of vice, disarmed of its ugliness by the seductive charm of civilised graces. But we must beware of judging a whole race by the samples of it that swarmed round thrones or in fashionable resorts. What was general, however, was a life of increased companionship and consideration for women. Cornelius Nepos, in the short preface to his biographies, contrasts the condition of the Roman ladies with those of Greece. "For who among us Romans is ashamed to take his wife with him to dinner; or in whose drawing-room does the matron not take the leading place, and mix in the general company?"

In Smith's classical dictionary, out of 1323 Greek historical names only 4·2 per cent. are those of women, while of 1555 Roman historical names 8·6 per cent. are female, a

change which indicates a very much increased participation of women in the life of the times; a participation quite equal to that in the England of the eighteenth century, for in Lecky's history of that period only 6 per cent. of the persons named are female, and in Lord Mahon's only 6·3 per cent.

Sir Henry Maine tells us (*Ancient Law*, p. 153) that the perpetual tutelage of women "was an institution known to the oldest Roman law, but from mature Roman jurisprudence it had entirely disappeared". Mommsen (ii., 408) dates the emancipation of women at Rome from the second century before Christ. But in the time of Justinian, to quote once more the learned Maine, "jurisconsults assumed the equality of the sexes as a principle of their code of equity". Woman was somewhat restricted in the disposal of her property, but "control of her person was apparently quite obsolete". This was no outcome of legislative enactments, but the result of silent growth, of an undercurrent of sympathy which is the most precious as well as the most potent factor of civilisation. It has already been shown, however, that this feeling had not proceeded far enough to place the two sexes on an equality in regard to the obligation of chastity. The "Lex Julia de Adulteriis," while it provided for the punishment of adultery on the part of a wife, was absolutely silent as to the least shade of culpability on the part of an unfaithful husband. The highest point which Roman moralists reached was very much analogous to that of Aristotle. "Of course," they practically preached, "a man is acting within his legal right, and no one can say he is doing anything actually wrong in living as licentiously as he pleases, but if he is wise he will marry, and, for the sake of the great domestic comfort it will bring him, he will remain faithful to the wife he has chosen." No moral law was broken, but only the dictates of prudence; much as we should say that among ourselves a man who spends every penny he earns, though perfectly at liberty to do so if he pleases, is yet in his own interests to be warned against it.

Effects of Christianity.

The nobler doctrine of the beauty of purity was first raised as an ethic ideal among the Romans by Christianity,

which tolerated no such worldly-mindedness of maxim. What the Buddhists had taught with much fantastic admixture the Christains maintianed, at first without extravagance, as a lofty ideal.

When Christianity was first founded there were scattered through all Judea small communities of Essenes, whose origin has been the subject of much as yet inconclusive speculation. They had grown up unnoticed during the previous century, unostentatiously perhaps, as Rappite and other religious communities have grown during our own time in America and elsewhere. But no one who reads the fragmentary descriptions of Josephus and Philo, after an adequate perusal of Buddhist literature, can avoid the strong suspicion that mystic notions of purity had percolated from the east and blended with Jewish monotheism to form at least the kernel of the new enthusiasm. For while the Essenes maintained the duty of love and worship towards God, and had not only a great veneration for the Mosaic law, but also a strong infiltration of Mosaic ceremonial, yet the features which distinguished them from their neighbours were such as had till then been taught by Buddha, and by him alone. They abhorred the shedding of blood of any creature; they abominated war; they taught the utmost simplicity of manners, and a love to all men that could suffer no bounds of nation or of race, though not unsusceptible to the bigotry of creed. But, above all, they regarded chastity in man just as in woman to be, as Lecky calls it, "the ideal sanctity". Most of them refused to marry, carrying the suppression of the passions to that extent; some were allowed to marry, but with the Buddhist provision that no sensuous purpose was to be served but only the holy duty of peopling the world. Now Buddhism was five centuries old at this time, and, under the devout ascendency of King Asoka, it had reached its culmination of influence, spreading east and west its ramifications of enthusiasm. Whether the Essenes were in truth only Jews who had been infected by the new ideals of sympathy and purity, it would perhaps be rash to conclude, but there is probability in the supposition. At any rate, we know that, in Syria of the time of Jesus, great respect, though sometimes mingled with a little ridicule, was

paid to these bodies of inoffensive, kindly mystics, whose doctrines won the admiration even of those who, though they recognised the sympathetic as the worthier side of their natures, yet suffered their lives to be under the dominion of the sensuous.

What was essentially good in the Essene doctrine, John the Baptist and Jesus taught with redoubled emphasis, losing nothing of its mystic beauty, while discarding its fantastic elements. In regard to sexual purity, Jesus sought to mitigate the cruelty that visited the female transgressor, but he insisted on visiting male unchastity with an equal condemnation. The law of sympathy had to relax the severity with which the law of might had maintained its property in women, but it had also to withdraw from men the liberty to look upon women as the mere instruments for the gratification of passion.

The Apostle Paul was more than a little inclined to weave into the new teaching some of that fantastic glorification of celibacy, moral enough perhaps among those who expected the speedy destruction of the world, but immoral and unnatural as a practical rule of social life. In the actual spread of Christianity the Buddhist percolations from the east were of greater prevalence than the sweeter teachings of Jesus, and so there came about that beatification of celibacy and of the hermit life, the preference of the enraptured virgin over the kind mother of happy children, which disfigured the early Church with so much extravagance.

Nevertheless, to the Christian Church belonged the office of preaching to the west, as Buddhism had to the east, the obligation of men to that chastity which they had learnt to impose upon women. But while the teachings of a noble faith are efficacious to some extent by holding up a worthy ideal for imitation, yet the actual practice of the mass of mankind is not suddenly affected by them. The real progress still goes on under the influence of the forces already described. It is useless to appeal to the sympathy of him who has little or none, whereas the man who possesses it will find its control influencing his actions without much external teaching. Christianity profoundly altered the attitude of its devotees

towards the idea of chastity, and the slow percolation of new enthusiasm was a most useful factor in moral advancement. Yet, in the main, we may follow the course of progress as before, seeing only a slow advance but never any sign of marked revolution in the beliefs or practices of men. An Augustine might be suddenly converted from a fashionable libertinism to a holy purity, but even the clergy remained in general what men had been, the fuss which was made over a continence that is now general enough without exciting remark, the odour of sanctity which invested people for conduct which we should in our time regard as merely proper for a respectable unmarried man or woman, show that even in early times the old practices were in the main carried forward into the new faith.

Looking down the long list of the Canons of the Church Councils given by Guizot in his *History of Civilisation* (dates ranging from A.D. 314 to A.D. 980), we are struck with the futility of the fight which the Church waged to maintain the chastity of its priests. From the fourth century onwards, Mosheim begins to speak of "the extremely corrupt state of morals among the clergy". (*Cent. IV.*, part ii., chap. ii., sect 8.) When the Teutonic barbarians swept over the Roman Empire, Christianity became their faith, but their morals were still barbarian; while the position of women and the chastity of men declined. A capitulary of A.D. 819 declares that in France a public penance must be performed by any man "who forsakes or kills his wife for no other reason but to marry another," the inference most clearly being that with reasonable cause he was entitled to kill or desert her. The husband regained the right, long lost in Rome, of thrashing his wife. In France, throughout the whole feudal period, the sole limitation was that he must beat her only "moderately and without causing death". (Legouvé, *Hist. Morale des Femmes*, p. 184.) But this was a right claimed throughout all Europe until within a century or two of the present time. It lasted in England till the fourteenth century, when it began slowly to become obsolete, not as the result of enactment, but as the natural sequence of milder temperament. (Pike, *History of Crime*, i., 255). Blackstone, in his *Commentaries* (i., 444, edition 1844),

says that "in the politer reign of Charles II. this power of correction began to be doubted". It was certain that old usages and laws allowed the husband to give his wife a moderate correction within reasonable bounds either with scourge or cudgel. But it is clear that from the reign of Elizabeth onward it became less and less respectable for a man to thrash his wife, until, by that process according to which the judges mould the law to make it accord with improving sentiment, the once undoubted right was barred and rendered nugatory by every legal contrivance, until it was recognised to be obsolete. The ancient laws of the Welsh allowed to the husband the express right to give his wife three blows with a broomstick.

But not only did the ascendency of the Teutonic barbarians bring back to last for a thousand years and more these unpleasant sentiments and practices, it did much to destroy the growing sanctity of marriage, which in the latter days of the Roman Empire had reached no little degree of stability. Guizot says that in the France of Charlemagne's time "the relations between the sexes were extremely irregular, a man took and quitted a woman without scruple and almost without formality" (ii., 225). No doubt the Church fought hard against abuses, but its own standard was by no means high. The Council of the Gaulish Church held at Vermerie in A.D. 752, decreed that if a man found it necessary to leave his abode, and if his wife refused to accompany him, he was to do penance and marry again; and quite a little list is given of contingencies under which what we should call the offence of bigamy is permitted by the Church. But in spite of the Church, the wealthier classes long continued to practise polygamy, and in the case of kings the Church occasionally permitted it. (Michelet, *History of France*, Carlovingian period.) The description which Gibbon gives in his forty-eighth chapter, of the state of sexual relations in Europe up to the tenth century, is calm and moderate, but it supplies us with a vivid picture of the looseness of moral feeling. The Church could fight with but little effect when a majority of its own ministers were incapable of any high ideal. Too much of course may easily be made of the "sub-

introduced women," the housekeepers of the priests, who for several centuries held a well-defined and in no way disreputable position: for these were to all intents true wives. But any one who reads Lappenberg's account of the priests of England and France in the eleventh century (*Anglo-Norman Kings*, p. 73) will see that they were at one with the moral notions of their time in their apparent want of all perception of the obligation of men to chastity. Lecky quotes a number of remarkable passages which show that in some districts of mediæval Europe the parishioners compelled the priest to keep a "sub-introduced woman," so that their wives and daughters might be the safer. (*European Morals*, ii., 333.) A sad comment on the life of these unlovely times! As a rule the prelates set a scandalous example; and some bishoprics, as that of Normandy, scarcely ever had a decent occupant in a couple of centuries. Sometimes the Church made a stand when the lives of prelates became notorious, and not unfrequently the reason for deposing or refusing to confirm the nomination of a bishop was that he had too many children by different mothers. An abbot-elect at Canterbury was rejected for having seventeen illegitimate children in the one village; an abbot in Spain, in A.D. 1130, was proved to have kept seventy concubines, and a bishop of Liége was deposed for having sixty-five children. (Lecky, ii., 331.) It would be impossible in any brief form to give an adequate idea of the sexual disorders of these times, but the more carefully one studies the records of the centuries from the sixth to the twelfth the more assured will he become that Europe had been restored to the barbarian level. Even the papal chair itself was occupied by men of more than barbarian lewdness. The tenth century, which was perhaps the worst of all, saw three popes placed in the holy chair by the influence of lewd mistresses; and for 150 years there was only one short interval in which the head of the Church was not, to use the words of Mosheim (*Century X.*, part ii., chap. ii.), "libidinous and flagitious". As Muratori puts it (*Antiq. Ital. Medii Ævi*, v., 82), "unheard-of monsters filled not only many of the chairs of bishops and abbots, but likewise that of St. Peter; everywhere might be seen the pro-

fligate morals of the clergy and the monks". Hallam says "a few respectable names appear thinly scattered through the darkness, but all writers concur in stigmatising the dissoluteness and neglect of decency that prevailed among the clergy". (*Middle Ages*, chap. vii.) A vast improvement in the papacy was witnessed in the twelfth and thirteenth century, but in the fourteenth and fifteenth the scandal was almost as bad, though cloaked with the polish of more refined manners. The "enormous vices" for which John XXIII. was deposed in 1409 included every form of sexual degradation; and the general dissoluteness of the whole cardinal body throughout the century was most scandalous. Judged by the calmly dispassionate history which Ranke gives of the papacy in the sixteenth century, popes and cardinals, whilst they lost some of the ferocity and grossness of the earlier centuries, were none the less on that barbarian level wherein is no belief in the need of male chastity.

It is natural that the vices of the clergy should attract the most signal notice. The laxity of men in general was taken as a thing of course, and the tone of the secular literature of these ages most certainly leads to the conclusion that, whatever religion might preach, the average man saw no harm in sexual looseness. Moreover, though men resented unchastity in wife, or sister, or daughter, the general feeling towards female frailty, apart from one's own relatives, was rather that of amusement than of disapprobation.

Not that these middle ages were without good men, and pure women. They had that great advantage over the barbarian level into which no tradition of better things from former times maintains in places a nobler standard. And we must also remember that a lurid light is thrown on all that is amiss in those days, which makes them seem worse than the manners of a Malagasy or Tahitian population upon the same general grade of advancement. Because, firstly, we have such ample records that statements which, by reason of vague generality, lose their force for an ordinary barbarian community, acquire a deep intensity with the reiterated scandals and outrageous details attached to well-known names. And, secondly, there is the fact that the laxity of

these times is sandwiched between better times that went before and better times that came after. Thus the condition of women and the poor appreciation of chastity which characterised the middle ages, though perfectly natural to men in the stage of advancement reached by mediæval Europe, are made to seem worse than in the nature of things they were.

Effects of Chivalry.

In the present day the formerly popular notion of the institution of chivalry as a great instrument in raising the position of women has very properly declined; yet it had an element of truth in it. We must be cautious in imagining that it made men more virtuous or women truly their queens and goddesses. But in its own way, and to a small extent, it marked the growth of a worthier sentiment in regard to women. We may even give a guarded assent to Guizot's proposition (*Civilisation*, i., 72) that it produced "a preponderance of domestic manners" and contributed to the growth of that love of home which characterises the modern as compared with the Greek or Roman world. Lecky thinks, perhaps with a little basis of truth, that the veneration of the Virgin Mary did something to ennoble the prevailing ideal of the female sex. "It supplied in a great measure," he says, "the redeeming element in that strange amalgam of religious, licentious, and military feeling which was formed around women in the age of chivalry." (*European Morals*, ii., 367.)

Sir Walter Scott speaks, in his *Essay on Chivalry*, of the "gross licence which was practised during the middle ages," and gives ample illustration of the way in which "the high-flown and over-strained Platonism of the professors of chivalry favoured the increase of licence and debauchery," but he speaks somewhat loosely when he says that "the marriage tie ceased to be respected and the youthful knights often chose their lady loves among the married ladies of the court," for these were no new things under chivalry. They were only the old licence in more courtly forms.

But in truth, whatever its profession of woman-worship, the spirit of the feudal times was strongly hostile to all the nobler claims of women. There are, of course, many women who would rather be petted and flattered than treated with respect; who prefer the incense of courtly adulation to the silent devotion of a manly affection. To these the extravagant compliments of chivalry would be most grateful; but to the nobler of their sex, compliments without respect, lavish caresses where simple justice is denied, always have the aspect of a burning insult. Thus we may safely say that the attitude towards woman of the age of chivalry, though an improvement on that of the previous centuries, was still degrading and unhealthy. As Pike says, though too strongly (*History of Crime*, i., 409), "that respect for women which is of modern growth and which is commonly supposed to be chivalrous, is sought in vain among the records of the middle ages".

In those times, the utter inferiority of women, whatever the language of sensuous love, was in practice everywhere proclaimed. They were refused inheritance to any important estate; and to the smaller, only a surly accession was allowed them. If a woman was nominally heiress, her sovereign lord always insisted upon her marrying the suitor who with money or with promises could purchase from him both woman and estate. In the assize of Jerusalem, that truest mirror of feudal ideal, we find that when an heiress has reached the age of twelve, the king shall choose for her three barons, one of whom she must select as her husband within fifteen days, or if she reject them all, she must forfeit to the king as much money as he could have got from the suitor. (*Assises de la Cour des Bourgeois*, chap. xxvi.) As often as she became a widow the king could thus impose a new husband upon her. A feeling of decency generally brought this tyranny to an end when the widow reached the age of sixty, but Edward IV. of England compelled the aged Duchess of Norfolk, then eighty years of age, to marry young Grey, the queen's family having greedy eyes on the estate of the aged widow. (Michelet, book xvi., chap. i.)

Reeves, in his *History of English Law* (i., 167), says that "in the middle ages a woman was in the custody of her lord till

she became of full age, and her lord was then bound to find her a proper marriage, but she always remained in his custody till she married with his consent". Sir Henry Maine tells us that (*Ancient Law*, p. 159) "the pure English common law, where it is untouched by equity or statutes, provides for a complete legal subjection on the part of the wife, through every department of rights, duties, and remedies".

From the *Anciennes Lois des Français* we learn that, in the middle of the fourteenth century, a woman was unable to appear either as witness or complainant in a court of law; her husband must be her representative, unless in the case wherein she complained that he had broken her limbs, or gouged out her eye, "because one ought not thus to chastise a wife". The foolish editor of these laws is struck with the undoubted amelioration in the condition of women which a couple of centuries had since then produced, and he attributes it to a change in the climate of France!

Monteil tells us (*Histoire des Français*, iii., 77) that, in the France of the sixteenth century, the executioner used publicly to flog unfaithful wives brought to him for that purpose by their husbands; but there was no possible redress for the wife whose husband was notoriously and shamelessly unfaithful. Ducking stools (i., 34) and other tyrannical customs were common, yet on the whole he considers that the position of women had been slowly but materially improving from the fourteenth century onward (i., 129). The growth of sympathy was resuming its beneficent progress, aided among many other accessories by two great agencies, the one of good, attracting upwards, the other of evil, sternly pushing from behind. Of these the first was that ideal of Christian gentleness and purity which had never been extinct, but had always been held aloft by some devoted souls; and even those ages that scoffed the most at virtue were conscious of something better and worthier than themselves in these purer lives.

Effects of Disease.

Yet in speaking of the progress of chastity it is humiliating to have to confess that the power sprung out of evil in

the shape of a loathsome disease was the more potent of the two agencies. Venereal diseases had doubtless been long existent in Europe, yet they seem to have been but mildly infectious. It was in 1493, as it is alleged on good authority, that the sailors of Columbus brought from America the vile contagion of syphilis, and it is a powerful testimony to the utter looseness of morals that the disease spread with incredible speed over all Europe. Montesquieu, a sober writer, says (*Esprit des Lois*, book xiv., chap. xi.) that "two centuries ago a disease unknown to our fathers passed from the New World into this. The majority of the noble families of the south of Europe perished by a contagion which became too common to be shameful." Professor Draper gives a description which may perhaps be somewhat vehement, but, even if we make large deductions, there is still a strong indictment left. "If contemporary writers are to be trusted," he declares (*Intellectual Development of Europe*, ii., 232), "there was not a class, married or unmarried, clergy or laity, from the holy father Leo X. to the beggar by the wayside, free from it. It swept over Europe, in a march, equable, unbroken, universal, making good its ground from its point of appearance in the south-west, steadily and swiftly taking possession of the entire continent."

I have seen in medical works the estimate that about a third of the population of Europe perished by the virulence of the disease in the first ten years of its prevalence. Any such statement must necessarily be the merest guess; all we can say is that a very large proportion of the people were killed by it, and that, although its malignant and fatal character steadily declined, it has since that time, generation after generation, always had a certain proportion of victims.

But the appalling severity of the epidemic at the end of the fifteenth and beginning of the sixteenth centuries was conducive to the spread of virtuous habits. What the beauty of purity had failed to draw men towards, the stern and almost inevitable punishment of impurity drove them into. Those most grossly addicted to base sexual indulgences died out, and the disease was as a huge besom sweeping the viler elements of the population relentlessly away. Parental love,

always more fundamental and more operative than any other form of sympathy, must have found a new practical, as well as the old ethical reason, for guarding by every means within its power the chastity of the young. But perhaps the most strongly active cause would be that of prudence, offering its warning to those at all sensuously inclined, that a brief gratification might have to be expiated by a lengthened suffering. We shall subsequently discuss the value to be attached to the morality which thus springs from a "prudent, cautious self-control," but whatever its intrinsic worth, it assisted much in the actual purification of Europe.

In the period between the fourteenth and the seventeenth centuries a great improvement is visible, due in large measure to the causes mentioned, though others were auxiliary. For instance, it can hardly be doubted that the revival of learning, the spread of printed books, the theatre as a refining amusement, the growing custom of travel, the expanding pleasures of art and music, gave to men's minds the scope for that healthful activity which is so useful an antidote to licentious passions. But, in truth, the cause important beyond all others was merely the altered nature of the society that was left after many centuries in which lusts and laxity had been rampant. If every couple on the average were to leave four children, then each man living in the tenth century must have been represented by more than 1,000,000 descendants in the sixteenth; but as we know that instead of that number he had less than three representatives, the population being not more than trebled, there must have been all along the line a huge suppression of lives possible and actual. Now there were beyond a doubt innumerable causes at work determining which were to be the few survivors out of the possible 1,000,000, but none so potent by a long way as rightness of life. That strain of character which produced good husbands and faithful wives in the tenth century would largely preponderate in the sixteenth; and so, without depreciating the effects of other causes, we may attribute the improvement of the sixteenth and seventeenth centuries merely to the at length

visible effects of a process always at work but for a while not clearly seen in its results.

Status of Woman in England.

In the statute book of England one finds in early times few references that give any very vivid idea of the position of woman; but such as there are bear witness to only a very slow improvement in her status up to the sixteenth century. In 1235 we find regulations to prevent what is called the constant practice whereby nobles defraud widows of their dower; in 1275 the violation of a modest woman is to be punished with two years' imprisonment, though the forest laws of the same period deal out much more serious terrors to the man who hunts a deer or boar in forbidden woodlands. In an act of 1486, against the forcible abduction of women, the proviso is added that none of the prohibitions therein expressed apply to the man who carries off one whom he claims as his bondwoman.

All through the middle ages, and down to a little more than a century ago, men convicted of felony could be saved from the gallows if they could plead "benefit of clergy," that is, if they could read and write; but no such humane fiction stood between the woman and the sweeping severity of the laws. She went to her doom, if convicted, whether she could read or not. (Blackstone, i., 445.) For women was reserved the hideous punishment of being burnt alive, and this was the fate of every woman convicted of treason against the king, or of petty treason against her husband. On the last occasion when a woman was burned in England (1790), the circumstances showed how deeply altered was the sentiment of the people. For though the sheriff who refused to do his duty and carry out the sentence of the court was liable to prosecution and a heavy fine, not a sheriff in England could be found so callous as to superintend the burning of a woman; only a couple of centuries before, it had been a not uncommon duty readily enough undertaken by sheriffs. Sir Benjamin Hammet, the Home Secretary, was compelled himself to see the law carried

out, but he introduced a bill for the abolition of this "savage remains of Norman policy," and the burning of women was swept from our statute book without a dissentient voice.

A couple of centuries ago it was customary enough to flog through the streets women stripped to the waist and tied to the back of a cart. It is hard to realise that only in 1821 was this brutal spectacle abolished. (*Statutes, George IV.*, cap. lvii.) But it had been growing more and more obsolete until the altered sympathies of recent times refused to endure it as a law of the land.

Up to the beginning of the eighteenth century, a husband could legally place over his wife's head an iron "brank" or "scold's bridle" which gagged her mouth; and he could keep it there for days together. Or, if he preferred it, he could take his scolding wife where the ducking stool was ready, and, with a scurrilous crowd to help him, could plunge her repeatedly under water. Chambers's *Book of Days* gives the year 1745 as the last occasion on which this festive display was afforded to the crowd. A century before that, many towns had a chair so contrived as to wrong the modesty of the woman tied into it, and on this she was hoisted shoulder high for small offences, and carried through the streets amid the jeers of men and boys.

Nevertheless, it would be quite safe to say that by the beginning of the fifteenth century, Europe had reached once more the stage in the emancipation of women that had been before attained at Rome. In some respects it was better; in none was it any worse. But from that time onward there has been a progress beyond anything that the world had previously seen, and the cultured races of to-day are gradually getting the better of old prejudices and granting to women a position of healthful freedom. Yet it is to be remembered that it is only a century ago since the first European nation ventured to put daughters on the same footing as sons in the division of an inheritance, and that to this day not one of them regards unchastity in a man as an offence equal in heinousness to that in a woman. The feeling is still very much that which was expressed a century ago by David Hume when he spoke of modesty and chastity as being

"duties which belong to the fair sex," and attempted to show that there is justice when mankind "impose not the same laws with the same force upon the male sex". (*Treatise of Human Nature,* book iii., sect. 12.) He held that while it is contrary to the interests of society that men should have an entire liberty of indulging their passions, yet there is no reason to expect in them the same degree of virtue as we demand of women; and to substantiate his position he appealed to the practice and sentiments of all nations and ages. Truly the laws of every people until quite recently bore woeful testimony to the truth of his contention. In sexual matters they have been uniformly lenient to men and cruel to women. In France, till within a few years, the law expressly provided that seduction and procuration were free from any penalty; every promise of marriage was void, no matter though, under its cowardly shelter, a man gratified himself at the expense of a maid who fully trusted him; not even if such a promise of marriage had been duly written, signed, and sealed, could she have the slightest redress; and there was an express provision that the father of an illegitimate child was free of any claim for its maintenance; the burden had to fall entirely on the unfortunate woman. (Legouvé, *Hist. Morale des Femmes,* p. 70.) But any one who chooses to examine in detail the prevailing legislation will find the same traditions holding their place from a past in which female unchastity was unsparingly condemned, while no possible blame was attached to male unchastity which did not interfere with rights of ownership.

The Dawn of Nobler Conjugal Sympathies.

And yet the existing sentiment of cultured societies is in advance of their laws. As Maine says (*Ancient Law,* p. 169), "the status of the female under tutelage, if the tutelage be understood of persons other than her husband, has ceased to exist.". The girl who has come of age is free from the possible oppression of outside power until she marries. And even then, although in a sense the law places her under the tutelage of her husband, custom restricts the marital power within

narrow limits, and legislation is by degrees giving her rights as regards property, and in other respects, which leave the actual tutelage but the shadow of a once formidable power. Among the middle and upper classes the marriage relation is now one of greater sympathy and mutual consideration than the world has ever before seen on anything like so great a scale. A refined type is becoming common in which the lower gratifications of the relation are becoming wholly subsidiary to a sense of the most intimate, the most sympathetic of all companionships. In the savage and barbarian states, the animal passion is the fundamental basis of marriage; whatever else there is can only be superimposed. If a wife, by reason of illness or any other cause, becomes incapable of gratifying her husband's desires, that alone is ample ground for divorce. In feudal Europe such a cause was everywhere allowed. Pope Gregory II. (Fleury, *Hist. Ecclésiastique*) permitted a husband to take a second wife if the first were by illness rendered incapable of satisfying him, the only condition being that "he ought to give to the sick wife all necessary subsistence". Such a view of marriage is very far removed from our present ideals. The large number of men who lead perfectly chaste lives for ten or twenty years after puberty before they marry seems to indicate that the sensuous side of man's nature is slowly passing under the control of sympathetic sentiments. Moreover, there is ample reason to believe that educated women now largely enter upon marriage out of purely sympathetic attractions, in which sex counts for something, but with all its grosser aspects gone. Dr. H. Campbell (*Difference in the Nervous Organisation of Man and Woman*, p. 200) says that "it may be confidently asserted that sexual desire enters not at all into the minds of a very large proportion of women when contemplating matrimony". And yet what a world of room for progress, as these peoples of lower culture pass onward into the state of middle culture! What armies of prostitutes to sweep away! What myriads of men diseased and seared with vice to die out and leave room for better types!

Women have in the main secured of late years an equal right of inheritance and equal facilities of education. They

are by degrees being afforded equal careers for the display of genius or aptitude. But they have yet to secure political rights. The first citizen privileges ever allowed to English women date only from 1882, when the right of voting at municipal elections was granted to female ratepayers. Women have yet to be truly placed upon an equal footing with their husbands in the marriage relation. Certainly the laws of 1857 in England removed in part the semi-barbarian anomalies of divorce, but even now, a man's remedy is much more ample than a woman's. In all probability a few centuries will see the question of divorce sunk into a matter of unimportance. At present the sense of obligation in marriage is too new to be rashly disturbed. All the long fight of twenty centuries to impress upon men the sanctity and solemnity of the wedded relation has had none too much effect. Nevertheless we move onward towards a period when natural love and conjugal sympathy may be left to take their own course. At present if a statute were passed permitting married couples to separate and remarry as they pleased, not five unions in a hundred would be affected. The wife would cling to her husband, and the husband to his wife, from motives far deeper and worthier than compulsion of the law. In those states of America where easy divorce prevails fifty-nine marriages out of each 1000 seem to end in divorce; but then, to these states flock the dissatisfied of many states, and the proportion is really very much lower. Yet even as it stands, it is less than six out of 100. In France, where since 1884 somewhat easy divorce laws have prevailed, 1·6 per cent. of the marriages have ended in divorce, while in England less than one marriage in 1000 has been so dissolved. In Australia, where English laws prevail, but with many liberal additions, only two in 1000, or $\frac{1}{5}$ per cent., have terminated in divorce.

The time will doubtless come when it will be held a monstrous thing to keep in chains of bondage those who have ceased to love or respect each other, to compel to the daily contact of common housekeeping those who have come to despise or hate each other. Then it will be open to such

couples to separate as freely as they had united; but when that time comes, scarce a couple will wish to separate for if the world can only continue for five centuries more that progress in conjugal sympathy which has characterised the past two centuries, marriage will be naturally indissoluble.

CHAPTER X.

THE GROWTH OF SOCIAL SYMPATHY IN ANIMALS.

Parental Sympathy Spreads out into Social Sympathy.

The sympathetic type is thus the one which is more and more distinctly emergent as we ascend in the animal scale; for not only does an increasing parental care give to a species some preference over competitive types; but an increasing conjugal stability also allies itself with this parental care, to form the home circle, and to build up the family wherein, as we shall see, is the birthplace of all moral relations. These fundamental sympathies towards child and wife are still, even in the finest races of men, the deepest and strongest; but it was impossible that the nervous organism of animals could have grown susceptible to influences so delicate, yet so powerful, without giving rise to a more general capacity of sympathy, spreading out to brothers and sisters, blood-relations and neighbours. Had it been the case that while sympathy for wife and child was advantageous to the species, sympathy for all others was hurtful, we should have had most certainly an emergent type of the very narrowest range of feeling, devoted to its own, but indifferent or destructive to all outside. This is a type which in lower grades the exigencies of survival have rendered only too common. It would be fatal to the tiger to have any sympathy for the agonies of the struggling deer; it would be fatal to the race of deer if the doe were to waste her milk in suckling the orphan fawns of the herd, and left only inadequate supplies for her own; it would be fatal to the wandering handful of savages, always

on the verge of starvation, if they had any scruples about seizing food when they could get it, without considering whether or not other tribes might have to starve in consequence.

But the mighty roots of sympathy which the parental and conjugal relations have already established, are always there, prepared to spread out into a general social sympathy, whenever and wherever an advantage is likely to arise therefrom. And this is always the case where the life of the species is furthered by a peaceful and harmonious gregariousness. It must on no account interfere with the development of the individual or of the family, for then the sum of its results is detrimental; but wherever the well-being of these is first of all secured, a wide social sympathy gives them both an increased scope for good. Thus the emergent type in the end is that wherein parental and conjugal sympathies widen out, as possibilities arise, into general social sympathies; for, where the individual favoured of fortune is impelled, without endangering his own existence or that of his family, to lend a helping hand to other individuals under less happy circumstances, the average chances of the race are thereby improved. But, as we shall afterwards see, all such altruistic feeling must be of cautious growth, spreading from within and embracing a small circle with efficiency before attempting to extend itself too far. A conquering tribe may owe its predominance equally to the strength of social cohesion within itself, and to its absolute want of any benevolent regard for all others outside. But where many conquering tribes come into conflict, that which finds itself most competent to embrace a large and still larger circle within its bonds of sympathy will emerge, while others too exclusive will wholly fail in the race for supremacy. Thus there is an agency constantly at work tending to enlarge the sphere of social sympathy when once the permanence of the general means of sustenance permits the area of fellowship to be increased.

The detailed progress of this development will in due succession be reviewed; meanwhile we have to note, as nearly as may be, the point where it first begins to show itself; at what stage in animal development the social sympathies

become faintly apparent. Here must be drawn a very sharp distinction between three conditions that are similar in appearance though widely different in nature—mere agglomeration, selfish co-operation, and sympathetic union. It by no means follows when we find a large number of animals living together that they are united by any tie of sociability. Maggots wriggle in swarms over the same dead carcase because the blow-fly has there deposited a multitude of eggs. Being born in swarms, and finding food at hand, they remain in swarms. Nothing more than this seems in the main to characterise the cold-blooded animals. The shell-fish which cling by myriads to the same rock form only what Buffon calls a "physical assemblage".

Where animals are easily capable of extensive motion, they will in general scatter out, but if they still remain in large agglomerations, they must have some bond of union quite distinct from mere contiguity of birth. Among the cold-blooded animals there is no indication that this is ever more than a merely selfish co-operation. Their nerve susceptibilities place them under the control of hunger, fear, and sex appetite. Of these the first would bid a multitude disperse, but the two latter would on the whole tend to keep them together. Even among timid animals, which never think of fighting, fear causes a satisfaction to arise from society. The individual is partly relieved of the constant strain upon one pair of eyes and one pair of ears. For when 10,000 young herrings swim together, the prowling monsters which one of them might fail to see will surely be detected by some one or other out of the huge mass; and when it darts away, its neighbours instinctively follow, and the whole swarm is instantly in full flight. The advantage thus derived will tend to keep the harmless timid sorts in large agglomerations, and breeding will be facilitated when males and females live in close vicinity to each other. Yet in all this there may be no sign of sympathetic union. No herring when itself secure is ever known to run into danger to assist a fellow, nor even to carry food to a neighbour; no advantage is ever *given* by one to another, but each *takes* what advantage it may from the company of others.

Alleged Sympathy in Insects.

Were it not for the case of certain of the insects we might say with accuracy that no sign of really sympathetic union of societies occurs below the level of the warm-blooded animals. But the singular social customs of ants and bees form a great anomaly in the general course of progress. Many insects care for their eggs and for their young in a manner comparable only to the parental solicitude of much higher forms; but in none does this feature reach so singular a development as in the Aculeate Hymenoptera, the acme of its progress occurring in the ants. The manner in which the eggs are tended, the larvæ placed in sun and shelter, the pupæ nursed, the emergent young assisted in their exit, cleaned, fed, and even taught, indicates a parental care which has no parallel till we reach the highest of birds and mammals.

A review, however, of the evidence on the subject, which is now extensive, will suggest that this care has more in it of the nature of a mechanically working instinct, than of an emotion. I have been far from exhausting that evidence, but after reading the works regarded as of chief authority the impression left upon my mind is that while there is much that is puzzling, the parental care of the ant is of a class with the spinning skill of the spider and the cocoon-making faculties of the silk-worm. No doubt, as we shall subsequently note, parental care is always fundamentally instinctive, and therefore in a manner mechanical, but there is a great difference between the play of instinct which bids the hen brood upon her eggs, and the sympathetic impulses and responses at work when that same hen is proudly stalking amid her pretty brood. The facts seem to indicate that the parental care of ants and bees is of the former, rather than of the latter class. Such as it is, it represents the termination of a sort of blind lane; parental care of this particular kind showing a steady rise among the class of insects and culminating in these families of Hymenoptera. It works for the same end as the parental progress we have already considered; it lessens the number of young, but increases their

chance of survival by unremitting care, and yet the means adopted are widely different. In all the cases hitherto considered progress was secured by a steady lessening of the fertility of each female with an increase of her maternal care. Among bees and ants the same result is attained by withdrawing a very great proportion of the females from the possibility of motherhood. A female ant lays her thousands of eggs, and a queen bee something like 80,000, but for each female that is fertile 1000 are left sterile. Yet it is among these unreproductive workers that the parental instinct of caring for eggs, feeding larvæ, sunning pupæ, and teaching the young is found. All maternal care of the insect type has hitherto been ignored in this book because it leads no further. Parental affections of the type which culminates in man begin at the level of the fish; such as exists among invertebrates is of its own class, reaching its highest perfection in ant or bee, and being there definitely arrested.

Returning now to the subject more immediately in hand, we have to note the very decided social instincts of these insects. An ant-hill or a bee-hive is no mere agglomeration of individuals, for there are undoubtedly strong sympathetic necessities in the nervous constitutions of these little creatures. They seem to pine away if left in solitude, however well fed (Lubbock, *Ants, Bees and Wasps*, p. 5); their powers of co-operation are great, though probably much exaggerated in the average description; and they are capable of living with as many as 500,000 in the same nest, working, feeding, and playing, without sign of quarrel or ill-humour, even though every community is filled with an absolutely mortal hatred of every other community, whether of its own species or not. They are able to recognise their friends after an absence of months, this, however, not as the result of affections arising out of daily intercourse, but, as we gather from Lubbock's experiments (chap. vi.), from the same sort of instinct which makes turkey recognise turkey, and fowl consort with fowl. Moreover, there are, among abundance of anecdotes which invite much scepticism, well observed and carefully recorded instances "showing care and tenderness," as Lubbock puts it, between individual ants.

And yet the sympathies of both ants and bees have been greatly exaggerated. Their powers of communication, though considerable, shrink, as we see from Lubbock's experiments (chap. vii.), to limits by no means phenomenal, and love or charity seems to be a quality remarkably absent from creatures whose lives are so social. Sir John Lubbock deals very summarily with the claims of bees in this respect. "Far indeed from being able to discover any evidence of affection among them, they appear to be thoroughly callous, and utterly indifferent to one another. It was necessary for me occasionally to kill a bee, but I never found that the others took the slightest notice." (*Ants, Bees and Wasps*, p. 286.)

As to ants, the distinguished observer is a little more cautious. But it is evident from the whole tone of chapter v. that he has no great faith in their alleged affections. Thirty-five different experiments are recorded, in which as many individual ants were subjected to various troubles, either stuck in honey, or buried in sand with only their heads appearing, or else half-drowned and left unconscious to recover by slow degrees, or chloroformed or intoxicated. In each case the ants lay in their various plights full in the track of their fellows, yet were never in any way noticed; although stranger ants, dropped beside them, were immediately attacked and killed. When he enclosed in bottles, with muslin covers at the mouths, a few friendly ants and a few strangers, the friendly ones, though easily seen, and though their antennæ protruded through the muslin, were left to starve, while the strangers were soon reached by cutting through the muslin, and no sooner reached than slaughtered.

As Sir John Lubbock warns his readers that extreme differences may lie between various species, I carried out a series of the same sort of experiments on Australian varieties. In the grounds round my house there are seventeen different species active in the summer time. Daily for several weeks together during three successive summers I pinned down, near the entrances to their nests, some two or three ants at a time. I used for that purpose thin wires bent into the shape of a hair-pin, and with sharpened points. For species so large as the soldier ant (*Myrmecia sanguinea*) or bull ant (*Formica*

consobrina) I had fairly stout wire; for the little sugar ants, brass wires as fine as a hair. In every case I fastened them down lightly, so that occasionally they escaped of their own efforts; but in general the fastening was too firm for that, though always, I am quite certain, capable of being removed by the united efforts of two or, at the outside, three ants. In this way I fastened down at least ten specimens of each of the seventeen species. Their fellows passed them by in ceaseless streams on every side, and though I kept the sufferers under observation for three, four, and even six hours, I never saw a sign of sympathy or of the least desire to render help. If a fly was dropped in the same place, it was covered with six or eight ants in a second; if a strange ant was placed there, it was attacked and killed with fury. Many times I placed an injured ant near the mouth of its own underground home and watched it for an hour or sometimes two, making ineffectual efforts to crawl the two inches needed for reaching the entrance, but never once did I see a sign of proffered assistance. After repeating these experiments during a total of six months, and watching the behaviour of ants to more than 200 of their struggling fellows, I found the results uniformly negative, nothing happened which would suggest that ants are sympathetic by nature; yet these same ants were full of energy, and apparently of intelligence, for if one of their subterranean passages were dug up, the place would be a scene of ceaseless activity for forty-eight hours, more especially, however, during the night, till a covered way was temporarily erected in place of the ruined passage.

Large numbers of the most famous anecdotes of sympathy among ants seem to be errors of interpretation. Romanes gives (*Animal Intelligence*, p. 55) an account of a column of ants which was thrown into a panic when some of their number were killed, and others maimed; according to this story, the sight of the blood and sufferings of their comrades distressed them so much that the ants wholly forsook their old trail, exhibiting "signs of intense emotion" at the sight of ants' blood. In many parts of the world people are troubled with ants in huge columns. If so simple a thing could daunt them, glad would the inhabitants be. In the

country parts of Australia, how many thousands of housewives have crushed and scalded, poisoned and fumigated the long black lines, without finding the least relief! Observe a line of black sugar ants on their way to that chink in the kitchen wall which gives them access to the sweets; blot it out with the foot,—smearing the line for a yard with the blood, the mangled remains, the convulsive survivors of perhaps 1000 ants. It makes no difference; the column soon travels on as before, unmoved by blood or death agony, though for a time full of excitement.

Büchner gives in his interesting little work (*Mind in Animals*) quite a large collection of instances of sympathy among ants; but they are all, or mostly all, marred by a certain air of sentimentalism, sometimes by an evidently didactic purpose which renders them better suited for school books than for cautious works of science; and the same is to be remarked of some of Huber's and Forel's best known anecdotes. And most of these are greatly discounted in value by the fact that they are altogether casual, not the result of experiment but of chance observation, and therefore subject to errors of interpretation. Belt is the only satisfactory writer (*Naturalist in Nicaragua*, p. 26) who describes actual experiments, though these are very few in number, wherein one ant was seen to assist another; those buried in bits of clay being, as he observed, relieved from their position by their fellows. But, on the other hand, H. O. Forbes, in Portugal, observed that when an ant (*Formica ligniperda*) was badly wounded, the others of the nest only hurried up to lick the exuding juices, and gave no assistance whatsoever.

The case is full of doubt, yet there is left a balance of evidence showing something in the nature of sympathy, for Lubbock's experiments indicate how habitually ants will clean each other; and the fact that animals so pugnacious towards all other living creatures are so amenable to discipline within their own communities, so co-operative in their industry, and so harmonious in their ordinary relations must point to the possession of something analogous to what we call sympathy.

Yet this has but an indirect bearing on our present inquiry. For whatever be the amount of the quality thus displayed by

ants, it is demonstrable that in its nature it differs widely from the sympathy which is seen among the warm-blooded animals. Like their senses, it is analogous but not similar. Ants can see, as well as birds and mammals can; but how different must be the vision of creatures that have three eyes of one structure, and two pedunculated eyes, of a wholly different character, and presenting thousands of facets! Probably not one of an ant's eyes is capable of throwing a picture, nor have they any true retina to receive it. The vision of an ant is therefore something only vaguely analogous to that of a vertebrate. Ants have no ears, yet they seem from Lubbock's experiments, and others, to be able to distinguish sounds, but their hearing apparatus is in their antennæ, and perhaps in their legs, and their hearing has apparently only the faintest possible resemblance to the sense with which we are endowed. Ants, like many other insects, possess the power of emitting sounds; but how different are these sounds from the voices of the vertebrates; no currents of air, no vibrating chords, but only the strident notes of a metallic-like edge rubbing on a finely grated shield. In consequence of this, whatever power of communication the ant possesses, is in no way vocal; it consists of some peculiar manipulation of antennæ one against the other.

Insects, and especially the Hymenoptera, have reached the conditions which make social life possible and advantageous by the development of powers analogous but not similar to those that have arisen among the vertebrates in proportion as the need of social life has appeared. But we can see that the course of progress in the two cases has been utterly distinct, and that the senses, and therefore the minds of ants, though they may in their own measure work to the same results as those of bird or mammal, are yet the outcome of an altogether independent history. Thus we shall be guilty of no rashness in concluding that the quality which in them does duty for sympathy, is not in truth that quality as we perceive it in the vertebrates. We shall subsequently see that sympathy is in its physiological origin an outgrowth of emotional nerve developments which can have no counterparts but only analogue in the insect world.

In this digression the explanation is offered why our investigation has been at all points confined to the development of sympathy in the vertebrates. We are concerned here only to trace as solidly and surely as possible the fountain of moral instincts such as they appear eventually in man, and whatever qualities of analogous character we may perceive in ants have sprung from a different source, and have found in these insects their culmination, perhaps because incapable of further development.

True Sympathy First Appears with the Warm-Blooded Types.

Returning now to our more immediate subject, we must notice that while in fish and reptile a fairly good foundation of parental sympathy has been laid, with some little indication perhaps of conjugal sympathies, it is not till these have reached, in birds and mammals, a tolerable degree of efficiency, that the sympathetic nature thus prepared shows much tendency to spread out over a society. We meet with huge agglomerations among fish; even co-operative unions of the selfish class may be recognised both in them and in reptiles; but of actual sympathy not a sign. Only in the warm-blooded types does that become apparent, and its development keeps pace with the growth of vocal powers. In the main, this is more a case of concomitance than of causation; a general increase of complexity of type gives rise to voice on the one hand and to sympathy on the other. Yet they have some relation of causation; for never can sympathy, and especially social sympathy, become largely developed without the power of communication. Before an animal could learn to realise the feelings of another and become capable of sharing them, the moan of pain, the cry of fear, the grunt or twitter of satisfaction, and the caressing notes of love, had on the one hand to be produced, and on the other hand to find in the nervous organism chords upon which they were capable of acting. Voice asserts its utility first in connection with sexual attractions. If it be true, as Emil Selenka asserts, that the

female of the Virginian opossum is ready to receive the male for no more than three to five hours once in a year (*Entwickelungsgeschichte*, p. 104), her chance of being a mother is lost for a whole year unless she has the power of calling the male to her at the right time. In a somewhat less degree I have seen among other marsupials the absolute need of voice if an animal of solitary life is to have any chance of mating in the loneliness of a great forest when the short period, lasting only a day or so, of the annual amatoriness recurs. Even among animals which live in pairs or in flocks, though the need may be by no means so great, yet we see the sexual advantage of voice; the cow calls attention to her season by loud bellowings that cast the bulls into a frenzy, and the voices of the females of most of the more highly organised animals seem the most potent of all agencies for awaking the passions of the males.

Vocal powers thus originated are readily appropriated to the use of the parental relation, and most of the higher animals have a small repertory of sounds that convey each its own meaning. The significance of these is in part known by hereditary faculty; in part by the teachings of acquired instincts. Hudson (*Naturalist in La Plata*) shows that in the cases of three different species of birds on which he experimented, the young, while still within the egg, recognised in some measure the meaning of the mother's note; for a newly hatched bird, while still in the act of breaking its way out of the shell, with many a little cheep as it did so, would cease at the instant the mother's warning note was heard, and lie still and silent till an encouraging cluck would intimate that all was well. But this observant writer feels assured that the meaning of the majority of sounds is acquired after birth. It is well known that when a hawk or buzzard or eagle hatches out a brood of chickens or ducklings (see accounts of Brehm, Yarrell, and especially of Bishop Stanley), the young ones learn more or less fully to understand the notes of the foster-mother; but it is equally well known that a number of ducklings, though they come to understand the hen that hatched them, never seem so readily responsive to her as chickens would be, or as they themselves would be to a duck.

But we may readily perceive a general hereditary or instinctive fundamental part in this natural language, in the large range of notes that have a universal application. Couch remarks (*Illustrations of Instinct*, p. 94) that throughout the whole of the warm-blooded animals, which alone are truly equipped with voice, certain sounds have always the same meaning; a scream shows fear or acute pain, and calls for the most immediate assistance; a groan implies dull or suppressed pain, but makes no claim for help; the hush or lullaby of any mother can be soothing to any infant; and the calls of want or hunger of any young animals are readily understood by animals of widely different species. Any cat or dog will instinctively recognise the difference in tone of words spoken angrily and others uttered lovingly. The meaning of all these things must be hidden away in the organism of each animal as it is derived from its ancestors. But experience must teach the poultry-yard to scamper all legs, and flutter all wings, at the first note of the girl who feeds them; the pigs that rush in a mad race at the first rattle of the bucket; the cow that lifts her head out of the grass and trots to the milking place at the sound of a certain voice—all these and others show that while much is hereditary, much also is acquired. Or more correctly perhaps we should say that all of it is acquired; but while much is acquired in the experience of the individual, much also has been acquired in the experience of the race. And in proportion to the extent of this acquisition seems, in a general way, to be the development of the social sympathy.

Voice is universal among all warm-blooded animals; it is very rare among the cold-blooded, the only notable exception being the frogs; serpents hiss, and some lizards make sounds, but these can scarcely be considered as means of communication, though the frog's notes are probably a sexual attraction. Amongst the lowest mammals, the monotremes, voice is nearly absent, while in those nearest it in grade it is of small account. Inasmuch as we possess fewer of the links that join the birds to the reptiles we find fewer forms with no capacity in that way, but the lowest orders are the least endowed; ostrich, emu, apteryx being very poorly provided

in regard to vocal power. But in each class we find a steady development up to the wealth of melody and expressive sound of the highest birds, and to the comparatively rich vocabulary of monkeys or the fifty times richer vocabulary of the lowest savage.

In equal grades of progress rises the capacity for social sympathy. It is barely observable in any of the cold-blooded animals; it dawns among those of warm blood, and steadily increases as we ascend through forms of greater and greater complexity. But in very many species the tendency to social habits is checked or wholly obstructed by the necessity of finding food. When a litter of half a dozen kittens are nursed together, the mutual comfort they find in each other's warmth, their social games, and reciprocated kindness of licking and cleaning will naturally keep them together, and if they are abundantly fed they will remain a social group throughout their lives, sunning themselves in slumbering heaps, or following each other for the larger part of the day. Yet these same cats in their wild life would be obliged to catch each some 300 or 400 animals a year, a rate which would soon exhaust a district of considerable diameter. Half a dozen might easily keep an area of several square miles very bare of their particular sort of prey, and so it might readily enough come to pass that animals of a really social instinct would be compelled to live in considerable isolation. Even the rhinoceros, though his life is in general so lonely, is declared by Andersson (*Lake Ngami*, p. 514) to be very fond of the luxury of a few companions when the exigencies of nourishing so many huge bulks are not too great a tax upon the district. In the account which follows it must therefore be remembered that the general tendency to an increase of social feeling is all along the line subject to the control of other causes which may reduce or even obliterate it.

There is no satisfactory evidence for alleged instances of sympathy in cold-blooded animals. It is asserted, perhaps with truth (*Nature*, viii., 303), that the Ganges crocodile hunts for fish in companies that show some co-operation, yet this of itself is no indication of sympathy. Lacépède gives an

account of some ringed snakes which were tamed and seemed to have an affection for their master, and Romanes gives several instances (*Animal Intelligence*, p. 259) of turtles, tortoises, crocodiles, and snakes which developed similar affections. None of these stories, however, rings quite true; and we are justified in feeling scepticism when we hear of a python dying of shock at seeing its master fall in an apoplectic fit. Stories of ghosts and spirits, dreams and portents teach us above all things the unreliability of testimony accepted merely because the narrator is beyond the suspicion of wilfully lying. When an observer like F. Day gives the results of his own observations (*Linnæan Journal*, xv., 33), we may safely accept them as being trustworthy so far as they go. But then when the testimony is good it never goes far, and it certainly gives us little reason to believe that a cold-blooded animal is capable of any sympathetic emotions. I have kept frogs and lizards of various species, sometimes for a couple of years at a time, and never saw the remotest indication that the society of one was anything but utterly indifferent to the others.

Social Sympathy in the Lower Birds.

In passing over into the birds we find a gap, but not a great one, for the lowest orders seem little gifted with social sympathies. Of the fourteen genera in the ostrich order enumerated in the earlier catalogues of the British Museum, there are ten which go in pairs only, the conjugal sympathy having little tendency apparently to pass into one of wider scope; the remainder, emus, rheas, and ostriches, certainly live in herds of from three or four to about 100 members. But these seem more in the nature of agglomerations than of societies bound by ties of affection. No one ever sees them fondling each other, nor do they show any indications of those little offices of kindness whereby the social emotions of higher birds are displayed. Emus and ostriches are often kept in domestication, but however much they may be petted, they never reciprocate with the slightest show of regard.

A trifling advance is seen in the *Anseres*, or web-footed birds. Of 201 genera all without exception are social: living in communities that range from the little covey of ducks to the huge associations of petrels and gannets. These are in the main only agglomerations, but no one who watches the lives of a few ducks about a farmyard will fail to observe certain ties of affection that bind them together. In this, however, as in other cases, it is extremely difficult to discriminate between a purely social sympathy and the antecedent bond of conjugal sympathy. I remember having for weeks under observation a drake and two ducks which had been admitted into a garden for the purpose of keeping down the snails. In front of the window where I worked I saw them all day long and concluded from their extremely affectionate ways that a strong bond of social sympathy united them; yet on a little experimentation, I found that if only a duck was left with a drake the two were perfectly happy and showed no sense of the loss of a third. A duck or a drake left alone was most unhappy, but I noticed that if, while a duck was in that condition of discontented isolation, another duck was introduced, the two found no great satisfaction in each other's company. There was no possibility of mistaking their low spirits and general dissatisfaction with life, lasting the whole day long, till the admission of the drake woke the whole party to ecstasies of delight, indicated by a bobbing of heads, a long quacking, and mutual endearments lasting for an hour or two.

It is practically impossible, therefore, in the species of lower development, to dissociate the two forms of sympathy. Yet in any poultry-yard it may be observed that if the eggs of hens, ducks, turkeys and geese, be hatched under the same foster-mother, the accident of birth will not overcome certain natural instincts of sociability, and while they are still too young to be actuated by sexual feelings, the turkeys will form a group by themselves, chickens will go with chickens, ducklings with ducklings, and ere they are three months old the whole will be completely sorted out and associated together by certain social instincts pertaining to each variety.

A duck kept away for a time from her own set and then

allowed to join it, plunges into the very heart of the crowd, and finds an exquisite sedative to her fevered nerves in the sense of companionship. This is in the main a self-regarding feeling, but the web-footed birds are always capable of something like disinterestedness. A drake or a gander will at times be attracted by the cries of a suffering member of his association, and attack the enemy with intrepid courage. Romanes gives a record, on the authority of Edward, the naturalist, of a wounded tern which, when unable to fly, was carried off by a couple of companions, these being relieved, when tired, by another pair, whilst the whole flock fluttered around in evident care and anxiety. (*Animal Intelligence*, p. 275.) If such a record were isolated, I should be inclined to give it little weight. But Brehm tells us (*Vögel*, iii., 100) that terns are well known to give assistance to a wounded companion, and that they constantly exhibit a tender solicitude among themselves. It is well known also that sea-gulls will crowd round a wounded member of their flock, but whether this arises from sympathy or merely out of curiosity, it is hard to say. Yet the former is by far the more likely when we remember that they are constantly in the habit of joining together to drive away a hawk or crow, heron or fox, which has seized on one of their number. (Brehm, *Vögel*, iii., 115.) Of the Arctic puffin (*Mormon fratercula*), Audubon tells us (*Ornithological Biography*, iii., 10) that as often as one was shot and fell upon the water, some other would alight beside it, swim round it, push it with its bill as if urging it to fly or dive, and generally the helping bird would wait beside its wounded companion until the fall of a lifted oar compelled it to dive for its own safety.

Whenever nerve susceptibilities of an emotional kind have been sufficiently developed to urge an animal, in opposition to the instinct of self-preservation, thus to stay and help in the defence of a comrade in distress, or to co-operate with another in mutual defence, a slight but very persistent selective action would arise to maintain and increase the tendency. In the case of the eider duck, for instance, where several mothers brood close to each other and club together for mutual defence (Brehm, iii., 653) the chances of survival and of extension of

the species must be considerably increased. Audubon tells us (*Ornith. Biog.*, iii., 346) that the young ones of such defensive alliances are rarely assailed even by the most inveterate enemies of young birds. Professor Rymer Jones (*Cassell's Book of Birds*, iv., 201) saw a pair of skuas successfully defend their nests against an eagle, a feat which neither could have accomplished by itself. This is a class of observation which increases in frequency among the higher families of the order; in species such as the flamingoes we can see the social sympathies in a condition of considerable development. Not only do these birds live in great societies, but they post sentinels for the general safety. The fact seems to be beyond the least reason for doubt. (Brehm, iii., 546; Jones, iv., 118; Figuier, 318.) The habit must require the possession of some considerable sympathetic feeling, for, if one bird of a flock is to remain outside on the watch while the others below are gratifying their appetites with abundant food, we cannot attribute such a tendency to any other feeling than that of solicitude for the general welfare. It certainly is due to no selfish instinct. The arrangement is one premeditated and well understood. Brehm says (iii., 546) that, at the alarm of the sentinel, the whole flock raise their heads from their feeding, and without themselves looking to ascertain the cause of alarm they take to flight in regular order. The oldest of the flock, as Brehm tells us, in turns mount guard, "and are only with the utmost difficulty over-reached". The value of such social feelings is very manifest; for we read in Brehm that flamingoes are practically out of the range of observation, except with the use of a good telescope. Even in the midst of a thick population they are unmolested, the sportsman finding that the labour of circumventing a flock with sentinels so wary is enough to render a bird or two an expensive prize.

A similar instance of a favourable development of social sympathy occurs among the pelicans, which are accustomed to hunt for fish in the waters with concerted co-operation. (Brehm, iii., 568; Romanes, *An. Intell.*, 319; Audubon, iv., 89; Figuier, 292; Jones, iv., 236.) They form a ring loosely enclosing a shoal of fish, and contract it, by degrees driving

their prey into the centre ; at length the fish, crowded together in a small space, attempt to escape, and, when they make a dart for liberty through the ring, the murderous beaks of the pelicans snap them up as they pass. The birds adapt their operation with some little skill to the nature of the locality, and if they have a good shore to drive the fish against, they form only half a circle with the shore line for its diameter.

The *Grallæ* or stilt-birds, and the *Gallinæ* or pheasant order, are practically on the same level as the *Anseres* in regard to social feeling. Of the 243 genera composing the *Grallæ* (in the earlier *British Museum Catalogue*) forty-one are unsocial, 202 are more or less distinctly social.

Among the latter are cranes, herons, storks, ibises, spoonbills, stilts, sandpipers, snipe, woodcocks, plovers and bustards, for whose comfort and safety it seems necessary that they should live in communities. Many species of plover, though they rise with great timidity on the approach of a sportsman, will return to a wounded companion, and show signs not only of distress, but of a wish to render assistance. To the dotterel plover (*Charadrius morinellus*) Figuier in especial attributes this sympathetic feeling (p. 379). But of the whole plover family, Professor Rymer Jones remarks that, while the females are hatching, the males are in a flock keeping watch all round ; a cry from any one of them sets the whole in readiness either for combat or for flight. Of an allied family, the pratincoles (*Glareolinæ*), he states that if one of a pair be shot the other runs to its side in utter disregard of its own safety (iv., 14).

It is well known that cranes when feeding set sentinels, and that if they are attacked they form a circle, beaks outward, and so beat off the enemy. All the night-flying *Grallæ* answer to the description given by White of Selborne (letter lix.), and we may hear them far aloft calling to each other through the darkness so that none may be lost. The bird which, when in safety in the midst of the flock, thus calls to the distant straggler to let it know in which direction it must fly, is actuated not by selfish but by truly social instincts. In regard to storks, there is an abundance of anecdotes, some of them true, many more or less otherwise, which indicate the strength of their sympathies.

The *Gallinæ* are less distinguished by the strong sympathetic feelings of some species, but on the other hand they are more uniformly social in habits, the whole 115 genera being without exception fond of gathering in large societies, and incapable of living alone or in pairs. Some species, such as the grouse, quail, peacocks, turkeys, partridges, pheasants, megapods and currassows, form at certain seasons of the year large flocks of one sex only. At other times the companies consist of both sexes intermingled, and even when, as in the case of all the pheasant family, they sleep scattered out at intervals through the woods, it is said that the least appearance of danger causes a call to be made which is repeated and re-echoed far and wide through the midnight glades till the whole community is awake and on the watch. This by no means agrees with what is easily observed among domesticated fowls, which sleep so soundly that the poultry thief finds no difficulty in bagging a whole roost without waking them. On the other hand, the most ordinary observation suggests that, while the sympathies of fowls are far from deep, they have, amid all their pugnacity, friendly feelings which they display in their own fashion. It is true that a wounded or sick hen will be passed by with the utmost indifference, or even pecked and ill-treated by the others. But on the other hand I have noticed that if a rooster is having a bad time of it with a couple of turkeys, a cry of distress will often bring up hens and other roosters to the defence, and when the inmates of the poultry house are retiring to rest one may see, amid enough that is selfish, much also that indicates preferences and mutual good-will. I remember watching for several years the conduct of fowls that were by night cooped up in a small yard with a high fence. A little hole in this fence through which one could pass at a time was generally opened about nine o'clock in the morning, and admitted them to a field wherein they enjoyed themselves amazingly. They loved to get out, and generally stood waiting round the opening for a couple of hours before the time. Yet when the little shutter was lifted, I never saw the smallest sign of crowding or pushing. Never did a rooster make use of his superior strength to push the rest aside, and if two stepped

up to the entrance together, one waited while the other passed through. In short, the whole fifty or sixty managed the affair with an absence of jostling or selfish haste which, if we saw it among men at a ticket office, or at any crowded place of egress, we should attribute to a sense of orderliness and of that forbearance which arises from good social feeling. Little more can be said of the pigeon order. They are uniformly social; their habits are in general affectionate and gentle, but there are no species that display exceptionally sympathetic qualities.

Social Sympathy in the Higher Birds.

Beyond this order, however, we pass into the realm of those birds which we have already classed together as being marked by the possession of superior intelligence. In these, along with increased vivacity and sprightliness of life in general, there is found an increased activity and susceptibility to the emotions, in consequence of which they have a greatly quickened capacity of sympathy.

It is true that there is a whole order of the British Museum classification, the *Picaria*, which is generally characterised by unsocial habits, seventy-two per cent. of its species living either in solitary fashion or in pairs. But this is the group of birds over the classification of which there occurs most difficulty. Out of the seven systems, which I have to the best of my amateur ability examined, this is the portion in which confusion and uncertainty most distinctly reign. Perhaps the truth is that it consists of the *débris* of once much more extensive orders of birds, just as the edentates are an ill-assorted set of mammals grouped together only because it seems clumsy to found a new order for each separate fragment. Now it is easily to be understood how such families of birds may have secured their safety by developing solitary habits in face of the increasing preponderance acquired by species of eminently social character. Among mankind, if a nation is large enough and united enough to meet a hostile nation in the field, its success will lie most clearly in massing

itself for the conflict; but after it has been defeated in several pitched battles, its existence may depend much rather on scattering, for in a prolonged guerilla warfare it may best preserve its independence. The race united in overwhelming hosts will be the prosperous race, but the other will at least secure a precarious existence by a lonely life among hills or craggy valleys, in the deep forests or in the recesses of marshy lands. So it may happen that a continent may hold a few great dominant widespread peoples, along with scattered remnants of scores of others lingering here and there, and preserving themselves from extinction by isolation and obscurity.

Such perhaps have been the saving tactics of birds like the woodpecker, the wryneck, the kingfisher, trogon, and others of the order. Their means of safety have lain chiefly in the skill with which they could escape observation. A man may dwell for weeks in a forest wherein he can hear the woodpeckers at work, yet never catch a glimpse of one of them; and the Prince von Wied describes the extreme difficulty of seeing a goatsucker. Gould speaks in the same way of the podargus family, whose shyness and the extreme resemblance of its colour to that of the tree branches form its surest defence (*Handbook, Birds of Australia*, i., 84); so also do the jacanars, buccos, and similar unsocial birds find their security in unobtrusiveness. They survive as the gypsies survive in Europe, or the hill-tribes in India—continuing to exist, but not contesting the predominance of races more consolidated by sympathetic bonds.

Of these birds of higher intelligence there is another order not particularly characterised by social habits. These are the birds of prey, of which about half the species are social, the other half living in pairs. Their great strength and powers of flight render co-operation in defence of little necessity, while the exigencies of feeding will always tend to keep them asunder. The sea-eagles are somewhat social, so also are the kites and the vultures; but the eagle, falcon and buzzard sub-families are unsocial, though often a small coterie will hold a district in terror for years, while their own intercourse when they meet is harmonious.

But all the rest of these birds of higher intelligence are characterised by a very great degree of social feeling. Almost the entire body of the three great orders, the *Passeriformes*, or sparrow-like birds, the *Fringilliformes*, or finch-like birds, and the *Psittaci*, or parrots, are eminently social. I have been able to find from one source or another the habits of 1009 genera out of 1149; and of these no less than eighty-seven per cent. are of a highly sympathetic disposition.

Speaking of the largest division of them, the sub-order *Passeres*, Brehm says "most of them are in the highest degree social creatures. We meet but rarely a solitary bird; pairs occur only in the brooding season, but in the remainder of the year the pairs gather in families, and the families in troops, and the troops in multitudes, and the multitudes in regular hosts. And not only do the individuals of one species gather in company, but also their generic relations, which circumstances have led to consort with one another for a month, together form a single community, and work in harmony." (*Vögel*, i., 38.) This description applies to no less than 857 genera out of 1009 for which information is to be had. A few others, though social, are not so much disposed to form large companies.

That this capacity for union is a means of preservation is very fully known. Bishop Stanley describes (p. 154) the manner in which the smaller *Passeres* set upon the owl, more especially if they catch him abroad in the day-time; and Rymer Jones declares (*Book of Birds*, i., 303) that even the peregrine falcon, that terror of partridge, duck, pigeon, and quail, will yield before the impetuous and united attack of a company of small birds. Brehm gives the testimony of many observers to show that the tree falcon is often baffled by the union of swallows (iii., 239), and Couch says he has seen blackbirds mob a cat which was concealed in a bush. The group of the *Motacillidæ*, or wagtails, in their lively and confident style, are able by union to baffle their enemies. The elder Brehm records: "If the wagtails perceive a bird of prey they follow him with loud cries, thereby warning all the other birds of the forest. In such encounters I have often wondered at their courage and adroitness. When a crowd of these little

birds has put to flight a bird of prey, then resounds the shrill song of victory, after which the combatants disperse." The same capacity for united defence may be seen among buntings, larks, and many species of finch. The whole of the crow family succeed by their capacity for union in making themselves secure from all but the very swiftest and fiercest of their enemies, and the whole sixty-two genera of the weaver-bird family assure their safety amid countless enemies, and especially from snakes, by building their nests in aërial masses, over which they unite in constructing a single solid roof. In all this there is seen something very different from the mere agglomeration of a shoal of fish or a swarm of frogs. The societies are bound together by active sentiments of goodwill. Among themselves, they have those little variances and disputes which prove their general friendliness to be the triumph of sympathy, and not that merely automatic working of an instinct which produces the mechanical uniformity of social life among the ants. They are united by an actual capacity for self-sacrifice. For instance, the crows, choughs, and others of the order have the habit of posting sentinels, which refrain from feeding while the others are busy at their meal. Some families, such as the titmice, the missel-thrushes, the wheatears, and the bush warblers, set no special sentinel, but the instant that one of a company sees or hears an enemy it utters a sharp note, and like a flash the whole community is out of sight.

It is no doubt because of the cumulative survival of the most sympathetic forms that we observe so many of the species of these smaller birds in which the affections are remarkably strong and ardent. Audubon describes from his own observation the pretty sight afforded by a row of redpolls (*Fringilla linaria*) perched on the same bough, caressing one another, each of them from time to time popping a dainty into the beak of its neighbour, now to the right hand and now to the left. (*Ornith. Biog.*, iv., 333.) He quotes the words of his friend Nutall, whom he certifies to have been a most careful observer, as to the strong affection among themselves evinced by the chestnut-backed titmice. "When the gun has thinned their ranks it is surprising to see the courage,

anxiety, and solicitude of these little creatures. They follow you with their wailing scold, and entreat for their companions in a manner that impresses you with a favourable idea of their social feelings." (*Ornith. Biog.*, iv., 372.) Crossbills and bullfinches are well known to gather round a wounded comrade with piteous cries, and often with much disregard of their own danger, about which at other times they are so circumspect. Equally touching is the conduct of thrushes (*Turdinæ*), including the redbreasts, which form extraordinary attachments to persons who are kind to them, being wonderfully affected by the stimulus of their praise or the depression of their blame. Without putting too implicit a faith in all the narratives we read, there is yet a sufficient bulk of testimony on the part of competent observers, including naturalists like MacGillivray and St. Hilaire, to satisfy us that the bodies of these passerine birds are quivering with sympathetic emotions.

But the parrot order excel all other birds as much in sympathy as they do in intelligence. The whole of its eighty genera are social, a solitary parrot being at any time of the year unknown. They live in pairs indissolubly united; at the breeding season these brood in small clusters, but during all the rest of the year the pairs unite to form flocks of varying size, from a dozen to several hundreds. A majority of species are in the habit of posting sentinels, and a very wary old watcher is the veteran cockatoo or parrot which mounts on some conspicuous branch while his friends are busy below, robbing the cornfield or the orchard. At the least sign of danger a harsh cry resounds, and in a moment a flapping rush of wings is heard, and the whole flock are up in the air.

The parrot, parrakeet, macaw, or cockatoo has required for its larger brain development, and the more intricate nerve organisation which must be at the basis of its increased intelligence, a prolonged period of growth. The blind and helpless young ones, needing, as we have seen, three months of assiduous care from their parents, would demand for the preservation of the species that concomitantly with increasing intelligence there should grow up a parental sympathy of the strongest sort, and the great advantage derivable from the

co-operation of both parents would deeply emphasise the accompanying growth of the conjugal sympathy. Such a conjuncture would be eminently favourable to the development of the warmest social sympathies, and so it comes that while in their free life we find them distinguished above all birds for a mutual helpfulness, we see them in captivity especially noted as the friends and companions of mankind.

Numberless are the anecdotes of the loving care which parrots display to orphans of their own or other species, and their affectionate attentions to the aged or sick of maturer growth. (Brehm, ii., 290, 517, 527, 534; Romanes, *Animal Intelligence*, p. 275, etc., etc.) Audubon's account of the scene any day to be observed in America when parrots are being shot is most suggestive. The farmer "brings down eight or ten at the first shot; the survivors rise screaming into the air for three or four minutes, but return and surround their fallen companions, uttering loud cries, and this is repeated again and again".

Wilson (*American Ornithologist*, i., 380) says that the Carolina parrots pass their lives in the most social manner, being extremely fond of each other, and spending long intervals in scratching each other's heads and necks. "Having shot down a number," he relates, "some of which were only wounded, the whole flock swept repeatedly round their prostrate companions and again settled on a low tree within twenty yards of the spot where I stood. At each successive discharge, though showers of them fell, yet the affections of the survivors seemed to increase, for after a few circuits round the place they again alighted near me, looking down on their slaughtered companions with such manifest symptoms of sympathy and concern as entirely disarmed me."

Wilson and Audubon mention this habit as characteristic of all the North American parrots, and in Australia it is found strongly developed among the cockatoos. Gould says (ii., 19) that if a Leach's cockatoo (*Calyptorhynchus Leachii*) is shot, all the rest of the flock either fly round it or perch close at hand, and this with so little thought of their own danger that all without exception may easily be shot one after the other. No one can object that this arises out of stupidity or

curiosity; for under other circumstances they are among the wariest and wisest of birds. Gould mentions the same habit in other species, and Sir George Grey tells us (*North-West and West Australia*, ii., 282) that "the savage avails himself of the extraordinary attachment which the cockatoos have for one another, and fastening a wounded one to a tree so that its cries may induce its companions to return, he watches his opportunity to add another bird or two to his booty".

There can be no doubt that the birds as a class display successive stages in the development of the social sympathies, and that these follow the general advance of organisation. Thus, at the one end, a flock of ducks, though of social habits, form little more than an agglomeration, while at the other, a flock of parrots or cockatoos are distinctly a society welded together by the sympathy of mutual good offices. From the terrace where I now write I can see to the left, on the pale waters over the sandy bar that skirts a peaceful shore, very nearly 200 of the so-called Australian musk ducks (*Biziura lobata*). It is a most harmonious life they lead, arriving every morning after sunrise, fishing all day long on the shallow bar, and returning inland at night in two long lines. But no matter how near or how long one may watch them, he sees little that indicates a loving intercourse. Each works for himself, and if danger approaches, the first that sees it gives no call, but flies for his own safety, and the others, taking fright at the spluttering of the water, flee in the same direction. But to my right, where the rosella parrakeets (*Platycercus eximius*) are at work among the peaches and apricots, what a different sort of companionship! There the life is one of noisy talkativeness, intermingled with playfulness, and little endearments such as the musk ducks never show. At the least alarm one of them gives the warning, but some of them stay with a young one to encourage its flight. I have lain for hours on a summer holiday among the hills and watched where a gum-tree with its berries had attracted a flock of cockatoos or parrots. If one fixed his eyes for half an hour on some particular individual it was never seen to settle down exclusively to the satisfaction of its own appetite; it always manifested more or less of interest in its

neighbour; in the midst of a garrulous vivacity there was not only all the harmony of the duck life, but also a great deal which forced one to conclude that they found a sense of satisfaction in loving and in being loved. Of them the words are strictly true in which Brehm sums up the general characteristics of the whole 500 species in the parrot order. "Their communities hold by one another with true devotion, and share in common both joy and grief. In danger they stand by one another most loyally, and mutually strive to help each other to the best of their power." (*Vögel*, ii., 266.)

Social Sympathy in the Lower Mammals.

The mammals exhibit a much greater range in respect to social sympathy than do the birds. They start at a lower level, and reach in the apes and in man a higher degree of development. The great poverty of feeling in the lower families is due to the cause already specified, that the links which join the mammal to the reptile have been less completely obliterated than those which led from the reptile to the bird. But the averages of the two classes show no great discrepancy. This is seen in the fact that while of 477 genera of mammals 334 are social in habits, which amounts to seventy per cent., the corresponding proportion is seventy-eight per cent. in the case of birds.

In the lowest order, the monotremes, I can find no trace of any true social feeling. The platypus is seen in small companies on quiet ponds or secluded river bends. I have never had any chance of observing their habits, though I have seen them swimming and diving at a distance. From all I hear I am little disposed to credit them with more than that sort of agglomerative cohesion which is displayed by turtles or crocodiles. The other family of the order, the echidnas or porcupine ant-eaters, I have long kept under observation, having had sometimes half a dozen together for several months. I never saw one recognise another in any way. They inhabited, within the same enclosure, each its own corner in a state of torpid indifference. They feed chiefly in

the dark, and I have tested them by taking a lantern out to surprise them in that season of their activity; but never saw a sign of anything amongst them that would suggest affection or concern for each other, though it is of course always possible enough that while shy under observation they may be more affectionate when free from human gaze.

The marsupials are a little in advance. It is true that Carl Vogt says in his *Mammalia* (English trans., ii., 195) "they show not the slightest attachment," and Brehm says (*Säugetiere*, iii., 644) that though the female long carries her young, and affords them a secure retreat, her care for them is very mechanical, and exhibits none of that mother's joy which is so common in the higher animals. But I have already indicated that this is a trifle too sweeping, and is not quite true of some species. Similarly when Brehm tells us that indifference to everything not connected with their stomachs characterises all the marsupials, and that affection and friendship are equally absent from all species, we may take the statement as being in the main fairly accurate, and yet too strongly stated.

I have kept and petted several species without ever seeing any response that indicated the least affection. They learn to become quite tame and to recognise fairly well the person who feeds them regularly. One which my little daughter fed with the tenderest leaves and fondled many times a day showed less response than a hen or a turkey would indicate under similar circumstances. This has been in the main the experience of those who have kept marsupials. But in Australia I have been told of persons who have been able to establish friendly relations with them, though no one pretends that at the best they are very responsive creatures. Yet I remember observing a long-continued instance of affection in the ring-tailed opossum (*Phalangista nana*). I kept a couple in a cage out in the open air against a wall, but beneath some spreading trees. It was impossible for them to get out, yet I used to notice every morning, when I went to feed them, opossum excrement on the top of the cage. Every day I swept it off, yet next day it would be there; on taking a lantern out at night I found that one and sometimes two free opossums used to

come and play about the cage, and at any hour of the night I generally frightened away at least one. They were certainly not attracted by any food in the cage, for nothing was given to the captives but their natural diet, the tender leaves of the tea-tree (*Melaleuca*), and there were abundance of the trees themselves on either side not 200 yards away. When one threw cautiously the light of a lantern on the cage he could see the strangers clinging to the wires on the outside, while the captives clung to the inside, and their pink noses were communicating through the meshes. But the *Marsupialia* show wide variations among themselves, from the utter solitariness of the wombat and koala, to the gregariousness of the kangaroos, a gregariousness, however, that is marked by no visible play of affectionate emotion.

The miscellaneous group classified together as the *Edentata* are uniform at the lower level. Sloths, ant-eaters, pangolins, armadillos and aard-varks are all alike solitary; they are too dull of intellect to combine; they owe none of their preservation to skill, or quickness, or to the advantages of social union. The sloth, hanging from the bough like a ball of dried-up moss; the armadillo, defended by his banded armour, and soon disappearing in the earth; the aard-vark, effectually concealed in his subterranean abode which he only quits at night and that with extreme timidity, all of them owe their safety to these adventitious aids; the more unobtrusive they are, the safer; and society would to them be fatal. Of the fourteen genera which Sir C. B. Flower recognises, all are dull, all are defended by their own peculiar devices, and all are absolutely unsocial.

On the same level in regard to social feeling is the whole order of the insectivores. Of thirty-five genera, all, with a single exception, are unsocial; some merely with the inoffensiveness of indifference, others with pugnacious and even cannibal tendencies. The one gregarious genus is *Galeopithecus*, the flying lemurs, but this is avowedly misplaced among the insectivores, because of the anatomical difficulties of placing it with the prosimians, to which, by its habits and manner of reproduction, it would more naturally belong. Of the remaining thirty-four genera, the hedgehogs are the least

unamiable, the moles the most ferocious ; but all writers on general zoology sum up the order as being eminently unsocial.

The rodents form an order of varying habits, yet with a slight preponderance of species that are social in their life. Out of 119 genera contained in the order, a laborious search has failed to yield me information of the habits of more than fifty-three, but of these there are thirty-four which are social in their lives, a proportion amounting to sixty-four per cent. The other nineteen genera consist of animals which at the breeding time go in pairs, but throughout all the rest of the year are absolutely solitary. But it is to be noticed that the species which are social are those which are present in large numbers over considerable tracts of the earth's surface, such as the squirrel, the rabbit, the rat, and the mouse. The unsocial species on the other hand, in spite of the quills that protect the porcupine and the blind subterranean life of the mole-rats (*Spalacidæ*), are never numerous and are confined to narrow habitats.

When an animal is so fertile as the rat or the mouse, and so mutually helpful, we need no other explanation to understand why it is so universally distributed. It is well known how stoutly a number of rats will unite for the defence of one that is attacked, and the lemming is even more gifted with the capacity for combination. Octodons always stand side by side against a common foe. Both these and the mice co-operate in securing their nocturnal plunder; and the direct experiments of Romanes (*Animal Intelligence*, p. 363) indicate how much of cunning and self-restraint there often is in these co-operations. The marmots and allied genera undoubtedly post sentinels which assiduously watch while the others feed, and at the shrill whistle of the observer on his elevated place all dart for their burrows. Other species, like the rabbit, post no sentinels, but at the appearance of danger, the first that sees it often gives, before running to secure his own safety, a drumming sound which is the signal of danger to the others. The cavy and the rat-hares (*Lagomys*) also give a friendly warning. Various species of dormice when attacked by the weasel make a signal which brings up the company to the rescue, when the enemy usually beats a retreat.

A large proportion of the social species find their advantage in the co-operation of digging or building. Rabbits working together hollow out extensive homes for themselves with many avenues of escape; and the musk rats (*Fiber*) make a common burrow with a regular fortress at its heart, wherein they may defy an enemy by their united defence. Brehm relates, on the authority of Richardson (*Säugetiere*, ii., 528), that in hard winters when their sub-aqueous entrances are frozen over, many hundreds unite in breaking for themselves breathing places through the ice. The Patagonian cavy (*Dolichotis*) is said by Carl Vogt (*Mammalia*, ii., 171) to move through the plains in small groups under the leadership of an old male. But whatever there is of social discipline in the order is chiefly seen among the beavers. Not that they are so decidedly social as the popular idea makes them. In L. H. Morgan's most excellent account of them (*The American Beaver and his Works*) we are told "the notion that they live and act in colonies associated in villages is erroneous". A pair of beavers will form with their offspring of the first and second years a family of from seven to twelve members, but two families often join in working at the same dam. Co-operation rarely extends beyond three families, or about five and twenty individuals. But these are most cordially united. They toil at the one burrow and its canals; they work together in felling trees, in building their wonderful dams, in laying up their winter stores of bark for food; in short they indicate the advantages of the social life almost as much as do the highest birds. Thanks to these instincts of combination for work and defence, the beaver has, as Brehm declares (*Säugetiere*, ii., 472), scarce an enemy that can harm it except man alone.

The order of the bats presents no such advanced type of social feeling, but on the other hand they are all without exception gregarious, and of the eighty genera most are found in companies of very considerable size. Brehm speaks of them thus (*Säugetiere*, i., 326): "Among themselves many, if not most, of the bats maintain a social life. Some species form regular associations which hunt and sleep together, though never without some strife and disturbance. A dainty morsel or a cosy sleeping-place is sufficient cause for discord; never-

theless the strong will do their best to stand by a weak or wounded comrade, and often help it according to their power."

Several writers assert that the flying foxes (*Pteropodidæ*) will flock up to relieve a comrade at the slightest cry of distress. Brehm quotes Hensel as to an alleged sympathetic quality of the *Phyllostomata* or leaf-nosed bats. "My servant once had the lucky thought (in South America) to put several living bats into three high open glass vessels, and to set these out at night in a suitable place. Next morning he found in the vessel 325 bats of the same species which had entered on account of the voices of the bats already within, and which could not escape by reason of the smoothness of the glass walls."

I am inclined to doubt the soundness of the conclusion; but if it be true of this particular species, it is untrue of others, for to test the experiment with Australian species I repeated it with deep glass jars every night throughout a summer month. The voices of the captive bats which could neither climb out nor find room to stretch their wings were clearly audible out upon the terrace, round which were many ivy-clad tree trunks inhabited by hundreds of bats; while from the eaves of the house the little creatures could be seen fluttering to and fro, and overhead against the starry sky one could see them darting about in all directions; yet never so much as a single bat joined the captives in the jar below, nor, while I watched from a window, could I ever see a bat descend to the edges of the jars.

Professor Bell (quoted *Mammalia*, p. 83) says that the long-eared bats (*Plecotus* and *Megaderma*) occasionally clean each other's fur; and Romanes speaks of a Mauritius flying fox (*Animal Intelligence*, p. 341) which liked to be petted by its owner, and would rub its head against him and lick his hands. But after a long search I have found little in the natural history books, and as little in observations on captive species, that would suggest the possession by bats of any great degree of sympathetic feeling.

The order *Cetacea* is highly gregarious. Of its thirty genera, all without exception love to live in companies. The dolphins go in schools that reach to about a hundred as their

upper limit. (*United States Fisheries Report*, 1884, p. 15.) The pilot whales (*Globiocephalus*) and the cowfish (*Grampus*) roam in schools of several hundreds; and it is well known how very social are the porpoises. Beale, who though an early authority is still one of the best, says that as many as 500 sperm whales will often be found in one society, and he vouches from personal observation for a fact which proves that it is not mere gregariousness, but an actual sympathy which holds them together. He has noticed repeatedly that when one of a herd was wounded, the rest waited with it in spite of danger, from which they would otherwise have escaped; and, after its death, some few remained for a long time near at hand. (*Natural History of the Sperm Whale*, p. 51.) In the order *Sirenia* affection is still more apparent; for, though the manatees and dugongs go in comparatively small flocks, their devotion to each other is very manifest. (Brehm, iii., 555; Vogt, ii., 22; Jones, 386.)

Social Sympathy in the Higher Mammals.

These lead on to their nearest allies the ungulate animals, whose gregarious habits are well known. Every one is aware how the ruminants yearn for company, so that, as Gilbert White says (*Natural History of Selborne*, letter xxiv.), "oxen and cows will not fatten by themselves; but will neglect the finest pasture that is not recommended by society". Darwin speaks of the habits of cattle on the *estancias* of La Plata. They divide themselves into troops of from forty to 100, but during a stormy night they all mingle together; each morning, however, they separate out into their distinct troops, "so that each animal must know its fellow out of 10,000 others". (*Naturalist's Voyage*, p. 180.)

Galton, in his *Inquiries into Human Faculty* (p. 71), says of the cattle, whose habits he had so much leisure to study in South Africa, that they do not love society "as the monkeys do, for the opportunities it affords of a fuller and more varied life". Yet "the ox cannot endure even a momentary separation from his herd. If he be separated from it by stratagem

or force, he exhibits every sign of mental agony; he strives with all his might and main to get back again, and when he succeeds, he plunges into its middle to bathe his whole body with the comfort of closest companionship."

There is perhaps little that is altruistic in this social feeling. The ox is thinking of the delight which company gives to himself, not of the assistance he may be able to yield to others. Yet something of the less selfish nature seems to be present. Andersson relates how it often happens that when a buffalo is attacked by a lion, his comrades, instead of leaving him to his fate, combine for his defence, and sometimes succeed in beating off the foe, or even in goring it to death. (*Lion and Elephant*, p. 22.) The bison, the yak, the buffalo, and some species of antelope form rings for defence, horns outward, young ones within; while other species, such as reindeer and chamois, post sentinels for the safety of the herd; others again secure their safety by subordination to some experienced leader.

That all these and similar phenomena must have their basis, where we shall subsequently seek to find it, in the nerve development of the animal, is rendered plain by the conduct of cattle in a slaughter yard. A cow will go wild with frenzy if she sees another cow killed, and its carcase flayed. Pigs also, which see a comrade slaughtered, suffer from the same physical fascination or repulsion of horror which would demoralise our own frames at the sight of some cruel death of a fellow-man. No matter though he were one of the most diabolic of malefactors, and that our reasons agreed that no punishment would be bad enough for him, our nervous organism would utterly revolt from the gruesome spectacle of such a death as a traitor used to die two centuries ago. Where this physiological substratum exists, sympathy is a necessary consequence. A neighbour of mine once called my attention to a collection of cows gathered at one spot, lowing and groaning in an agitated way. He said at this place nearly a week before, a cow had died after a long death agony. Till the body was removed, the others had surrounded it in a state of great excitement, and for several days afterwards they gathered at midday about the same

spot. I thought at the time that the incident was unusual, but since then I have learnt that it is by no means uncommon. It is therefore all the more unaccountable that, on the other hand, many species of ruminants should gore to death a member of their own herd if it has been mortally wounded. Romanes accepts as satisfactory (*Animal Intelligence*, p. 334) accounts of instances in which the ibex has been seen assisting wounded comrades to escape. In their intercourse with human beings, the cow, the goat, and the deer, the antelope, the camel, and perhaps even the sheep show some little capacity for affection.

But the pachyderms are undoubtedly in advance of the ruminants. With the exception of the rhinoceros, they are all gregarious. The hippopotamus and tapir are highly social, though the necessity of large food supplies for their huge bodies limits the herds to the comparatively small number of from five to twenty. The little hyrax lives in much larger companies, over which a few sentinels keep watch, at whose signal all rapidly disappear. (Vogt, *Mammalia*, ii., 41.) All three genera of pigs live in a thoroughly social fashion, and so do their congeners, the peccaries, which, though small, unite so resolutely for their mutual defence that the wolf or even man himself is readily beaten off. Bell speaks of two species of hogs which rove the woods of Central America with so fierce a clannishness that it is positively dangerous to molest one of them for fear of drawing down the vengeance of the others. ("Mosquito Territory," *Roy. Geog. Jour.*, 1862, p. 263.)

The horse family is too well known for its sympathetic qualities to need much description. All are extremely social, and in their wild state they go in great herds. The stallions are unselfish enough in times of danger to think less of themselves than of the young and feeble, whom they drive before them, bringing up the rear themselves, and never exerting their superior speed for their own individual safety. Sometimes a herd will range itself in a ring, if the foals are very young and helpless, all the stallions ready to kick out with the hoofs of their hind legs. Gilbert White most truly says (*Selborne*, xxiv.) that "many horses, though quiet in company,

will not stay one minute in a field by themselves". If I take a pair of ponies out for a day, there is at least one of their comrades that always is to be found at the corner of the field from which they may first be seen on their return. His shrill cry of delight on hearing them trotting up the road, and his fashion of galloping along inside the fence, to keep abreast of their movement outside of it, proclaim the joy of his heart at the prospect of reunion.

Firm friendships usually arise between horses that are worked together, and many people know how much pleasanter it is to drive a pair which have grown to be happy in each other's company. I remember when one of such a pair was hurt, the other showed much solicitude. The wounded animal was kept apart for several days. When allowed to return to its comrade, the delight of the two was quite idyllic. Horses habitually caress each other, and incite one another to games.

Yet a distinctly higher level of sympathetic feeling may well be claimed for another of the ungulates, the elephant. No one can read the account which Tennent gives (*Natural History of Ceylon*), simple and unaffected as it seems to be, without gathering the conviction that the nature of this great creature is most delicately susceptible to sympathetic impulses. The mahout, or driver, directs the elephant at the most laborious sorts of work by nothing but his voice, and the obedience of this powerful assistant, as Tennent asserts (p. 221), is the result, not of fear, but of affection alone. He is happy so long as he is in favour with his human friend; miserable if spoken to in anger. He is conscious of disgrace, and keenly sensitive to degradation. Tennent speaks of cases in which there seemed to be little doubt that elephants had died of grief, and he describes another that came under his own observation, in which an elephant spent a supperless night in the jungle, watching patiently over the prostrate form of his drunken mahout, though he well knew the way home to food and comfort.

Bishop Heber (quoted Romanes, *An. Intell.*, 389) was struck by the almost human sympathy displayed by an elephant in assisting a sick comrade which had fallen down through weakness; and Tennent explicitly asserts that an

equal sympathy is shown in the wild state, the herd generally succeeding in carrying off a wounded comrade, supporting it between their shoulders. Andersson describes how he shot one which escaped in a disabled condition. He subsequently found it lying unable to move, and observed that for a long time thereafter another elephant brought it food and water every day. (*Lion and Elephant*, p. 263.) Livingstone knew of cases in which elephants combined to lift young comrades out of the pits into which they had been entrapped. (*Miss. Travels*, p. 70.) On the other hand Sanderson says of the Indian elephant that if a calf falls into a pit its mother stays beside it without trying to lift it out. In this part of his book, however, he is not contesting the great affection of the animal, but only the exaggerated estimate of its intelligence.

Petherick relates (from hearsay, however) a case wherein an elephant that had fallen into a pit had been drawn out by its friends. He himself once saw a young elephant which was quite out of danger charge the assailants of its mother and relieve her; no sooner was she free than she placed the sturdy little fellow between her fore legs, and retired caressing him. (*Egypt, the Soudan and Central Africa*, p. 415.) Tennent saw a similar case of heroism when a young elephant, ten months old, charged again and again among its mother's captors, and tried to remove the nooses from her legs (p. 195).

Wissmann describes the playful happiness of the life within the elephant herds, and Major Casati tells us that when any danger is to be feared one always acts as sentinel for the safety of the whole. (*Equatoria*, p. 27.) Major Skinner describes how in Ceylon he observed a herd of eighty during a moonlight night. Seated in a tree in perfect silence he watched all their movements and saw that as they approached the pool near by, two or three patrols went their rounds, while there was no doubt that the leader, knowing the herd to be close to the haunts of men, took extra precaution and incurred himself whatever there might be of risk. (*Forty Years in Ceylon*, p. 88.)

Brehm tells us (*Säugetiere*, iii., 18) that in domestic life elephants which live together form the most interesting

attachments to one another, and anecdotes are abundant which, if reliable, most fully confirm this statement of the naturalist.

Yet on the whole the carnivores excel all the orders yet spoken of just as much in sympathetic qualities as they do in intelligence; the dog for instance being in advance of any of the ungulates. It is somewhat difficult to characterise the carnivores as a whole. So many of them live in solitary fashion, that the order can hardly be classed as one of peculiar sociableness. And it is strange to notice how wide are the discrepancies even in the same genus. The jackal is highly social, yet its ally the fox is unsocial; the fish-otter of the rivers is unsocial, while the sea-otter is eminently social, and not only possesses the instinct of posting sentinels, but exhibits the most complete loyalty to the welfare of the herd.

The gregarious species among carnivores are chiefly found in the family of the dog, the seal and the walrus. The cat family, the civet family (*Viverridæ*), the racoon family (*Procyonidæ*), and the sub-families of the badgers and weasels are all more or less solitary in life. Yet it is to be noticed that, armed as they are, the carnivores have no great need of union for their protection, so that there is nothing to hold in check the dispersive influence of food necessities. Nevertheless the singular tenderness of the maternal relations among them would seem to point to a large capacity for sympathy, and I do not doubt but that their social sympathies are really greater than one would judge from the general solitariness of their lives. A pair of cats licking each other's fur, a group of leopards, or bears, or even badgers, in their play exhibit a forbearance and mutual adaptiveness which suggest at least the capacity for social life. Watch a brood of half a dozen kittens at play together, their mimic battles are models of good humour, the claws are extended but never used, and when pats are given they are either with the velvet pad or else so gently delivered as to cause no pain. One of them will take the head of another between its jaws, and there is much pretence of biting, but never any reality; and it seems clear from the care they must take not to hurt each other, that they are actuated more or less by sympathetic insight. A kitten

playing with a child of the household is a wholly different creature from the same kitten receiving the advances of a stranger or an unknown dog, and however unsocial the cat may be in its native woods we are forced to allow it at least the potentialities of great social affections.

Add to all this, that it is from this order that mankind has derived its most popular household pets, nearly half of the known species being in some part or other of the world made the daily friend of man, and we shall have reason to suspect that the carnivores, whether gregarious or not, are richly endowed with social feeling. Moreover, he who tames cat or leopard, civet, ichneumon, racoon, coati, badger, otter, weasel, glutton, jackal, wolf, or seal, has no mere drilled animated machine to deal with, but a friend of more or less tender susceptibility, happy in his company, restless in his absence, demonstrative on his return, and delighted by his caresses. The bear, the lion, and even species much less tractable than these are capable of being placed on the most affectionate relations with man and other animals, if only relieved for a while from the necessary play of that butcher instinct which must form the staple of their natural lives.

Yet it is reasonable to expect that the most sympathetic forms will be found in species that are gregarious. The seal is a most affectionate animal if once it becomes accustomed to a household. Sir Frederick McCoy describes (*Prodromus to the Zoology of Victoria*, decade viii., p. 9) the interesting life of a specimen of *Otaria cinerea* long kept in a fisherman's house as a friend of the family; and similar instances are related in Brehm (ii., 301) and Rymer Jones (p. 174). Romanes sums up a great deal of this interesting literature by saying that when tamed the seals are "affectionate animals, liking to be petted, and showing an attachment to their homes". (*Animal Intelligence*, p. 341.) "The seals are remarkably social animals, devoted to their comrades, their consorts, and their young; they are animals which are prevented only by their helplessness on land from becoming as attached and obedient domestic animals as dogs." Very many sportsmen have related how they found it impossible to shoot at the upturned face of a seal when its brown eyes looked out

with a soft affectionate feeling. Brehm says that in their wild state, seals are obedient to the warnings and calls of the leader of the herd, and the same assertion is made of the coati, which is the only gregarious species of the family *Procyonidæ*,

But of course the highest level of sympathy of the order carnivores is found in the dog. . . . There is no sort of certainty as to the wild species from which domestic dogs are derived (Darwin, *Variation of Animals and Plants*, i.), and it is therefore impossible to determine how much of their sympathetic qualities they have acquired from their contact with man. Doubtless the greater part has been so derived. Yet we must be cautious not to unduly magnify man's share; for we know very well that the Australian natives are able to capture puppies of the wild dingo and convert them into serviceable dogs, and there is much probability, as Darwin has shown, that the North American Indians succeeded in training wolves to be useful household companions. Jesse records (*Anecdotes of Dogs*, p. 6) several instances, one on the express testimony of Cuvier, in which wolves have exhibited devoted attachment to their masters.

And, moreover, it is to be understood that when we speak of the change in the nature of the dog that is produced by contact with man, there is little reference to any absorption by the dog of his master's character. No doubt that takes place to a small extent in individual cases; he learns in some degree to reflect his owner's disposition. But in the main the change in the dog has been due to selective breeding. Savage and intractable dogs have been all along the line most unrelentingly destroyed. An affectionate and obedient animal has been tenderly preserved, and offered every chance of propagating its well-esteemed strain. In their wild state the wolf, the jackal, and the dingo are known to have strong parental sympathies as well as social sympathies of moderate strength. Starting from that foundation, and remembering that, for at least 4000 years, domestic dogs have bred mainly according to the discretion of their human masters, the more sympathetic strains being steadily preferred, we could easily account for the present superiority of our four-footed comrades. If on the average each generation were only one half per cent.

more richly endowed than the preceding one with those friendly qualities which men appreciate, the change from generation to generation would be utterly invisible, yet at the end of a century, reckoning four years to a generation, the advance in these qualities would be thirteen per cent. This would be an amount still scarcely recognisable under the circumstances. But at the end of 4000 years, still assuming four years to a generation, the amount of sympathetic quality possessed by dogs would be 148 times greater than that with which they started.

All this, of course, is suggested in Darwin's work, but for so fundamental a fact there can be no harm in a little additional emphasis. And it is most astonishing to observe the degree of sympathetic emotion of which many classes of dogs are capable. There is not a hint of exaggeration in Jesse's description of the conduct of his dog. (*Anecdotes*, p. 3.) "If I am melancholy, he appears to sympathise, or if I am disposed to be merry, he shows by his manner that he rejoices with me. I have often watched the effect which a change in my countenance would produce. If I frown or look severe, the effect is instantly seen by the ears drooping, and the eyes showing unhappiness, together with a doubtful movement of the tail. If I afterwards smile and look pleased, the tail wags joyously and the eyes are filled with delight."

In truth even man himself is less capable than some of the finer sorts of dogs of reading the signs of the emotions and entering into them by sympathetic reflexes. Everybody has had or has observed dogs such as that described by Darwin (*Descent of Man*, p. 103), which was excessively distressed if any one pretended to beat his mistress. I have seen dogs of generally quiet and gentle manner ready to fly at the throat of a person who should lift a finger against any member of its household; yet most of these affectionate creatures had discretion enough to distinguish between what was play and what was earnest, and the bigger sort, whose anger would be most formidable, after a growl and a glance which seemed to take in the situation in a moment, would become pacified, if not wholly content, on seeing that no harm was intended. But I have a collie which has never learnt the difference, and

is extravagantly distressed at the most playful stroke of handkerchief or glove laid on any one of the children.

In Jesse's great collection of anecdotes, there are scores of stories that are probably untrue, and scores of others wherein, though the facts are genuine, the interpretations are suspicious; but even the most sceptical sifter will leave at least thirty-eight that are not only based on unimpeachable testimony, but also are so inherently consistent with our everyday experience of dogs that we need have no hesitation in accepting them. They demonstrate a singular wealth of sympathetic feeling. The dog, a great lover of fires and accustomed to nights of cosy comfort, which sleeps through the cold drizzle of a bleak midnight beside its drunken master; the dog which, of its own accord, because it knows that it will thereby have earned the kind word and hearty pat of its human friend, works hard through a night of heavy snow to keep the sheep together and lose none of them; the dog which slowly starves to death beside the body of its dead benefactor—these are animals of a noble type, yet by no means uncommon.

Consider how full of a thrilling susceptibility must be the nervous organism of such an animal, and how serious a shock to the system may easily be delivered by reason of its responsiveness to explosive emotions. "The young dog," to use Miss Cobbe's expressions, "which leaps a score of times to kiss his master's face on his return from a long absence, and the older one which clings to him in silent ecstasy," are, doubtless, liable to physiological derangements by the violence of such feelings, and we are therefore the more disposed to believe those innumerable anecdotes wherein the death of dogs has presented every appearance of having arisen from the strength of their sympathetic feelings.

Social Sympathy in the Quadrumana.

Much of this, however, has been the effect of man's selective breeding of dogs; if we wish to find the sympathetic emotions at their highest natural level we must seek it in the order of the monkeys and apes. Yet as this is a new side

branch, a word will be required as to the order of prosimians which leads up to it. The two lowest genera, the aye-ayes (*Chiromys*) and tarsiers, are said to be generally found only in pairs, but they are extremely gentle and good-natured, though dull. All the rest of the order, eleven genera, are uniformly social in life, and in their forest haunts lead an arboreal existence of peaceful companionship which is in itself strongly suggestive of their relationship to the monkeys. All are affectionate little animals and are easily tamed; the natives of Madagascar and the East Indies, wherein they are mostly found, have long been accustomed to make them household pets. Their want of intelligence, however, prevents the development of the friendliest relations. Mere gentleness is apt to become monotonous.

But in the quadrumana we find the same social disposition combined with a vivacity which on the one hand makes it greatly more interesting and copious, but on the other hand is not without some effects of interference. That lively sociability which the monkeys display makes them the most playful of animals; but playfulness has a natural tendency to run into mischievousness, and thus it comes that the generally friendly life of the monkey troop is marred by small squabbles arising from time to time out of pranks that are fun to the perpetrator, though disagreeable to his victims.

Of the twenty-five genera comprised in the order (*Brit. Mus. Catalogue*) all without exception are social, most of them very highly so. In bands of from half a dozen to several hundreds they rove over a fixed area, which, like the lowest tribes of mankind, they appropriate as their own feeding district. Brehm says (*Säugetiere*, i., 46) "each band chooses for itself a settled area of more or less extent, over which it wanders under the supremacy of a leader which demands and receives the most absolute obedience. At first he gains it by strife and strength, but soon the respect which is thus acquired lends him a prescriptive authority, to which the others implicitly defer, fawning upon him in every way for his favour. On his part, however, he is truly solicitous for the welfare of his band, keeping up a constant watchfulness, casting his glances on all sides, trusting no living creature, and so

discovering almost always in good time any danger that threatens."

The same competent authority says (i., 41) "the love which all monkeys display towards their fellows speaks of a fine disposition. Very many animals abandon the sick of their company to die or to be devoured. But even their dead the monkeys seek to carry away with them." Professor Hartmann (*Anthropoid Apes*, p. 294) tells us that "they take care of and defend the members of their families in the same way as savages do, and they display much mutual dependence and loyalty".

The fulness of their social life is no doubt in part due to the comparative richness of their vocabulary. For of all mammals, except mankind, the monkeys have the widest range of sounds intended for the inter-communication of feelings. It has already been pointed out that the nerve organism of the more highly developed animals is exquisitely susceptible to the influence of sounds. The rooster that hears a mile or two away the barely audible crowing of another rooster is thrown by it into a frenzy of excited defiance; the kitten whose eyes are not yet opened, and is slumbering away its days unmolested by the multitudinous noises of the household, yet starts and trembles at the distant bark of a dog, for the preservation of the species has in bygone ages depended upon the response that the nerves can make to sounds which are intimations of danger. Still greater is the dependence of the species on its susceptibility to the cries of its young; and of all others the wail of distress of a feeble little one of its own species is the most potent on an organism of the higher class. A man in a railway carriage who can rest in comfort through the snort of engines, the shriek of whistles, the clank of chains, the creak of brakes, or perhaps the laughter of half a dozen noisy people in the same compartment, will grow exasperated beyond tolerance at the feeble wail of a sick or spoilt infant.

Though none of the monkeys, so far as is yet known, can be credited with anything that may be called a language, they have a fairly wide range of expressive sounds, and are able to communicate to each other their feelings by the use of voice

much more than is the case with any other animal except in the intercourse of the dog with mankind.

Many a savage passes through the routine of daily life with the use of not more than 200 words. Many a farm labourer among ourselves finds that 500 or 600 suffice him for all ordinary wants. If, then, the monkeys are possessed of so many as thirty distinct sounds, each conveying a fairly definite impression, the effect on their social life would be immense. Most people who keep dogs and take any interest in them will be able to count a dozen distinct sounds, different sorts of growls, barks, and whines used for special purposes. Major Skinner asserts that a spaniel which hunted with him for years in Ceylon could indicate by its call what sort of game it had started, and that he could always be prepared for elephant, elk, or boar, leopard, buffalo, or jungle fowl, according to the nature of the warning sound. (*Fifty Years in Ceylon*, p. 180.)

A dog's most wonderful accomplishment is his understanding of the long vocabulary which his master addresses to him, but in regard to his own vocal attainments he is far inferior to the monkeys, whose perpetual chatter, though, like the intoned sounds of a Chinese, or the grunts and clicks of a Bushman, to us meaningless enough, can be seen on close observation to carry with it a constant intimation of mood. We can see how, on a sudden change of note in one of them, the rest are instantly altered in demeanour; but no doubt it is only the strongly marked contrasts that are perceptible to us, as would be the case if we were listening to a foreign language. To the monkey ear there may be a score or two of gradations where we hear only monotony.

I have often watched the life of some of the smaller monkeys with a sense of deepening surprise. I have copious notes of a summer day in 1886 spent unmolested before a cage of little brown macaques (*Macacus cynomolgus*). For hours they played together in one of the jolliest of romps; they tickled each other, rolling over and over in the sawdust. They slily pulled each other's tails, and went off on wild chases, all in the best of humour. Then, in a spell of rest, they scratched each other's heads and examined each other's

furs, or indulged in mutual caresses. One little fellow always returned to place his head on the bosom either of his mother, or of a bigger companion. The elder caressed his brown head with tender fingers, or sometimes took his hand in his own and patted it there for minutes together. All this was alternated with cries of varied import, till it became impossible to doubt that, apart from parental and sexual attachments, a tolerably deep fund of general affection united the little company.

It is true that sometimes a similar day's observation will reveal a considerable tendency to mischief, destructiveness, and even malice. But where the emotions are allowed a free growth, this is always a feature in an early stage of development. We see it in the schoolboy, who, though he will be undeservedly flogged rather than suffer a comrade to get into trouble, though he is capable of unflinching loyalty to school or club or younger brothers, and shows in a hundred ways a rough unsentimental sympathy of his own sort, is yet quite ready when the spirit of reckless playfulness is upon him for much that seems callous and cruel. In the monkey the same disposition for mischief is to be taken as a set-off against a really large capacity for sympathy. That it is nowhere apparent among the lower types of animals is due merely to want of vivacity and intelligence. They take no interest in plucking the feathers out of a bird unless they propose to eat it. For mere inquisitive cruelty we must rise to the level of a parrot, a monkey, or a schoolboy.

I shall pay small attention to the mischievous propensities for the present, my business being to show that there is a real fund of sympathetic feeling at basis for future development, and we shall in course of time discern that while this receives every natural encourgement to grow, the other is, by pressure of circumstances, as surely eliminated.

As the quadrumana are the richest of all animals in their natural sympathies, and as they lead on to mankind, I shall examine the progress within the order in some detail. The lowest family consists of the marmosets, which are also the least endowed with social capacities, though, as Professor Duncan says, they are all gregarious and all affectionate.

They seem to be only slightly in advance of the prosimians. Bates says (*Naturalist on Amazon*, p. 48) that some species go in little companies of only three or four, but "they are often seen in a tame state in the houses of the inhabitants of Para, and when treated kindly, as they generally are, they become very familiar, running about the house after the negro children. The expression of countenance is intelligent and pleasing." Of the twenty species of marmosets that are known, nearly all provide the people of South America with domestic pets, their social qualities making them easy to tame, and interestingly responsive when kept as companions. One specimen (*Midas leoninus*) which Bates observed was very friendly with visitors, but showed a peculiar affection for its master, climbing a dozen times an hour upon his shoulder.

The next family, the *Cebidæ* or American monkeys, exhibit an advance. Of the ten genera, all are social, and most species rove in large companies. According to Vogt their disposition is "peaceable, patient, confiding". Among the Indians of South America, he says, "many species are kept as domestic animals, and that all the more readily as they become really affectionate in their ways, and the tendency to destroy is not very conspicuous in them". In their free life, as Professor Duncan says, "they are social and kind to each other". The genus *Mycetes* is known by reason of the extraordinary concerts with which a band will amuse themselves for hours together under the leadership of a regular conductor. Of the genus *Lagothrix* Vogt tells us that when an individual is wounded, it "will call its comrades to its aid by a peculiar shrill cry," while if the case is hopeless it will utter "the more subdued cry of death, and urge them to flight". Bates informs us that these monkeys are grave, mild, and confiding, and that they are much esteemed by the natives as pets. Brehm gives a long and pretty account of one which he himself knew, and grew to like as one of the most lovable of creatures. (*Säugetiere*, i., 224.)

The next genus of the same family, *Ateles*, the spider-monkeys, is described by Vogt as consisting of gentle and amiable, yet extremely droll little fellows. Duncan says they are particularly social, and Brehm gives much space

to a description of their friendly ways; his account of a female named Sally is long and circumstantial. Bates met with an amusing specimen: "It was an old female which accompanied its owner, a trader on the river Amazon, on all his voyages. By way of giving me a specimen of its intelligence and feeling, he set to and rated it soundly, calling it scamp, thief, heathen, and so forth. The poor monkey, quietly seated on the ground, seemed to be in sore trouble. It began by looking earnestly at him; then it whined, and lastly rocked its body to and fro with emotion, crying piteously, and passing its long gaunt arms continually over its forehead. At length its master altered his tone: 'It's all a lie, my old woman, you're an angel, a flower, a good affectionate creature'. Immediately the monkey ceased its wailing, and soon after came over to where the man sat." (*Nat. on Amazons*, p. 129.) In another place Bates describes how extremely mild are all species of this genus; the Indians are especially fond of it as a pet, the women often suckling the little ones at their own breasts.

Of the next genus, the Sakis (*Pithecia*), Vogt says (p. 69) that they always live in companies hidden in leafy recesses, but that, when caught, they become very tame and greatly attached to their owners. Bates (p. 332) declares that he who succeeds in keeping it alive over the first critical month of captivity gains thereby a most affectionate pet. He says he saw no monkey in South America that showed so strong a personal attachment as did this timid, silent little creature. Without prolonging the monotonous repetition of the same general terms, I shall sum up the smaller genera, *Urocaria*, *Callithrix*, *Chrysothrix* and *Eriodes*, by saying that all of them live in small troops; all are gentle, good-natured, difficult to keep in captivity, as they pine for the forest, but, if once domesticated, they always become most lovable little pets. *Nyctipithecus* is less social, generally wandering in pairs united by indissoluble attachment, but never in companies. Yet Bates (p. 333) gives an account of one which was very affectionate, and a great favourite by reason of its pretty ways.

The chief genus, however, of the whole family requires some further notice, as it represents the highest type of the

American monkeys. This genus, *Cebus*, always lives in troops of at least thirty, which travel in single file over the tree tops. Bates says (p. 208): "It is very frequently kept in the houses of natives. I kept one myself for about a year, which accompanied me in my voyages and became very familiar, coming to me always on wet nights to share my blanket. He offended me greatly one day by killing in a jealous fit my choice pet the nocturnal owl-faced monkey" (*Nyctipithecus*). Brehm describes them as "lively, docile, mischievous, inquisitive, whimsical creatures, more frequently tamed by man than any other kinds. Their social feeling is so strong that they consort freely with any species of monkey."

Professor Morgan (*Animal Life and Intelligence*, p. 397) tells of a fight between two baboons which he saw in the Hamburg Zoological Gardens. One retreated with its arm deeply gashed, and "sat down in a corner of the cage moodily licking his wound. Thither followed him a little Capuchin monkey (*Cebus capuchinus*) anxious to comfort him, nestling against him and laying his head against his side."

It was on a specimen of *Cebus* that Romanes made the long and interesting series of observations printed at the end of his *Animal Intelligence*. The details of ten weeks of carefully recorded life show not only what Romanes calls a "tireless spirit of investigation" but also a fine capacity for gratitude, affection, and tenderness, mixed up with much self-will, and no small degree of mischievousness.

But if the genus *Cebus* marks the highest limit of the American monkeys, it reaches no more than a medium standard when compared with the monkeys of the Old World, which in the *British Museum Catalogue* are grouped under the name of *Cercopithecidæ*. For the very lowest genera of this family, *Colobus*, *Nasalis*, and *Semnopithecus*, answer well to the description I have given of *Cebus*. They are all social, living in families which form large assemblies, and move about under the direction of an old male. Vogt says: "In a troop of these monkeys living in freedom there nearly always prevail a bustling activity, a continual commotion, and a boundless gamesomeness which only sometimes degenerates into quarrels

and violence. In general the members of a troop stand by one another faithfully in danger, and we have reports from eye-witnesses which must inspire us with genuine admiration for the high courage displayed by individual monkeys on such occasions."

Practically the same account is to be given of *Cercocebus*, *Macacus*, *Cynopithecus* and *Theropithecus*, except that on the whole their affectionate ways are slightly more conspicuous. But it is more especially when they are young that they are so extremely gentle and sympathetic. As the males grow older and develop their canine teeth they become somewhat morose and often quarrelsome. Professor Duncan (*Cassell's Natural History*, p. 126) tells of a macaque that had long been kept in the yard at Gibraltar by itself. One day a newly captured specimen was brought in. They at once recognised each other, and rushed into each other's arms, folding breast to breast in a warm embrace.

One of my brothers once patted on the head a small moping macaque at the Zoological Gardens in London. He spent some time fondling it and commiserating it. The next time he returned was in the crowd of an Easter Monday ; but the little creature recognised him, picked him out of all the visitors, and was so eager in its affection that the keeper, observing it, volunteered the information that it had not long been weaned, and was yearning for sympathy. Romanes quotes (*Animal Intelligence*, p. 473) an account of the manner in which some of these little monkeys nursed and tended a sick comrade on board ship. "It was truly affecting to see with what anxiety and tenderness they nursed the little creature. A struggle often ensued among them for priority in those offices of affection ; and some would steal one dainty and some another, which they would carry to it untasted."

There is quite a multitude of cases on record wherein monkeys of this family have carried off a wounded companion, or the body of one that had been killed, and I have notes of about a dozen travellers who, after witnessing the human-like grief of a group of monkeys for the death or agony of one of their number, have expressed the resolution never again to shoot a monkey. In *Nature* (xlv., 350) there is found an account

of an Indian monkey which for several days sat mourning over the little mound that marked the spot where its mate had been buried, after being shot for plundering fruit trees.

The highest genus of the family, consisting of the baboons (*Cynocephalus*), bears a much more equivocal reputation. They are not often tamed, being, like savage man himself, inveterate lovers of liberty, and the males are too strong and too powerfully armed with great canine teeth to be trifled with as household pets. Brehm has no very flattering account to give of some aspects of their nature, "wild, passionate, shameless, lustful, and mischievous," such are his epithets. But of course these may be equally applied to the lowest races of savage man without denying to them a fundamental capacity for social life, and for sympathetic relations underlying these qualities. Brehm himself acknowledges the great strength of their attachment. "They have an extraordinary affection for one another and for their offspring; they also become much attached to any one who has fed them and reared them from youth; and they make themselves useful to him in many ways. But they are so passionate that a single word, a mocking laugh, nay even a sly glance may set a baboon in a fury, when he will forget for the time being all his former affections." (*Säugetiere*, i., 168.)

Brehm speaks from abundant knowledge; for he himself in Africa kept several baboons for years as household inmates. He gives an account of one which he trained to be hall porter and which fulfilled that duty with faithfulness, intelligence, and great zeal. Perro, as he was called, "lived in friendship with all animals which we possessed, with the exception of the ostrich. Towards young animals he showed a warm affection."

Whilst the naturalist was living in the Soudan, he and his friends had quite a troop of baboons occupying the courtyard of the house. Each knew its own master, and soon learnt to recognise the name that had been given to it. "It was a trifling matter for a newly bought baboon to learn both. We brought the animal into the interior of our dwelling and shut him in a room. Then one of us took a whip and threatened the startled animal, whilst its owner entered and in de-

monstrative fashion constituted himself the protector of the oppressed. Very rarely was it necessary really to beat the baboon; he understood the threat and the protection offered, proving himself always thereafter grateful to his master for the help offered in distress."

Brehm says that when fever laid him low, when he was suffering from pain and from sore losses, and found himself in a sad plight, it was his baboon above everything else which brightened him up. It was in times of trouble that he learnt properly to know the nature of these remarkable creatures. Of one which he subsequently, out of his affection for it, carried with him to Germany he says: "Her devotion to me exceeded all bounds; whatever I chose to do, her affection for me remained ever the same. Friendly words softened her, laughter angered her, especially if she observed that it was aimed at her. She answered me immediately if I called her, and followed me like a dog. When her companion, a smaller monkey, died, she was most unhappy and from time to time uttered a barking cry, even in the night when it was her custom to sleep soundly. We feared lest she might not survive the loss of her companion, and therefore sold her to a menagerie where she could find fresh associates." (*Säugetiere*, i., 180.)

In their free life the baboons are eminently social. Blandford, a most satisfactory witness, both by reason of his high standing and his favourable opportunities of observation, states that in Abyssinia the baboons go in bands of from 250 to 300, the males taking the lead and also bringing up the rear of the troop, exhibiting the greatest watchfulness, while the females in the middle of the column confine their attention to the care of the young. The juniors sport about and play all manner of mad pranks, being always liable to a scolding or a cuffing from their elders if their exuberant spirits carry them beyond bounds. (*Geology and Zoology of Abyssinia*, p. 222.)

Professor Duncan says that in general baboons go in herds of as many as 300 individuals, and are "usually amiable and full of fun. A single cry of alarm makes the whole troop halt, and remain on the *qui vive* till another bark in a different tone reassures them, when they proceed upon their march." (*Cassell's Nat. Hist.*, p. 139.) Vogt asserts, upon good testi-

mony, that if one of them wishes to overturn a heavy stone to look for insects, he calls to his aid a few others, and by their united efforts they lift a rock far beyond the strength of a single individual. He concludes his description with these words: "I find no evidence of any natural depravity in the accounts given of their habits in a state of freedom, but only of their social virtues, and of their brotherly readiness to stand by one another in presence of danger".

Sir Andrew Clarke, in his *Zoology of South Africa*, remarks on the very affectionate life of the chacma baboons, as he had observed them in their free state; and Sir Samuel Baker (*Nile Tributaries*, p. 162) notices how strict is the discipline, the males always on the watch, while the young ride on the shoulders of their mothers. He agrees with other observers that baboons have a great variety of sounds for different purposes. He narrates a case which strongly corroborates one of Brehm's narratives. Two baboons which the Arabs had caught were flogged by them with merciless animosity, till Lady Baker interfered and obtained their release. The poor animals long after showed their gratitude for the sympathy extended to them.

Of the anubis baboon Prof. Duncan (i., 153) tells us that the companies rarely exceed fifteen to twenty, but there are always one or two sentinels on guard. No matter how tempting the fare, these are never seen to eat while on duty. Of baboons in general, as observed in confinement, he says that they are very paternal in their conduct, tender to the females and to the little ones. The infants are taken in their arms, and "pressed with loving embraces to their breasts in a manner quite human".

Social Sympathy in the Apes.

Without risking the monotony of heaping evidence on evidence, we may safely assert that of all the monkey order, exclusive of apes, the baboon is the most richly endowed with sympathetic qualities. There remains, however, a yet higher level in the apes themselves. The lowest of the four genera

of *Simiadæ* consists of the gibbons (*Hylobates*), which stand much on the same grade as the baboons, the apes thus beginning where the monkeys leave off. All of the species are social, and easily convertible into affectionate household pets, when the first great difficulty of healthy feeding has been surmounted. Prof. Duncan (i., 74) considers that they are extremely docile and affectionate animals. In captivity "not only do they become very fond of their keeper, but recollect him after long lapses of time".

Vogt says (*Mammalia*, i., 40) that "with one exception all observers who have seen gibbons in a state either of nature or of captivity describe them as good-humoured gentle creatures, which live at peace with other animals, and have no bad habits". A writer in *Nature*, ix., 243, declares that gibbons are highly sympathetic to injured companions. He says that while some of them were running about his garden, free, but friendly, one fell and hurt itself badly, after which the others all gave it the greatest attention, one in special taking every morning the first food she got, and giving it to the cripple ere she ate any herself. This, however, is diametrically opposed to the testimony of Duvancel (quoted Brehm, i., 107), who says that if one of a troop is wounded the rest always abandon it, unless it be a very young one, when its mother stays behind to assist its flight, or, if that be in vain, to face the enemy.

H. O. Forbes, an observer peculiarly worthy of reliance, says of the wau-wau gibbon: "It had a wonderfully human look in its eye, and it was with great distress I witnessed the death of the only one I ever shot. Falling on its back with a thud on the ground, it raised itself on its elbows, passed its long taper fingers over the wound, gave a woeful look at them, and fell back at full length dead. A live specimen brought to me by a native I kept in captivity for a short time, and it became one of the most gentle and engaging creatures possible. But when the calling of its free mates reached its prison house, it used to place its ear close to the bars of its cage and listen with such intense and eager wistfulness that I could bear to confine it no longer." (*Naturalist's Wanderings*, p. 70.)

Forbes possessed likewise a siamang gibbon, of which he says (p. 156): "The tender caressing manner in which he laid his long arms on my neck, and his head on my breast, was extremely amiable. Every evening he used to take a walk with me round the square with his hand in my arm, and he enjoyed the outing apparently as much as I did." Bennet describes two equally affectionate gibbons which were household friends of his; Hartmann describes five, Vogt two, and Brehm four. Wallace gives an account of one which never became good friends with him, though on excellent terms with his Malay boys. (*Mal. Arch.*, p. 134). But after all, gibbons are rarely kept in confinement. They are found in their wild state in only a small area, and, even there, are by no means numerous. "They cannot endure the loss of freedom. They long for their woods, for their free sports in the foliage, and grow quieter and more melancholy till they die." These are Brehm's words. But of all that have lived for some time in captivity his further expressions are true: "amiable in behaviour and in the highest degree friendly towards all to whom they have once granted their affection".

The next genus (*Simia*) contains but the one species, orang-outang, described by Vogt as a good-humoured and well-disposed creature, much attached to its keeper and to those who are kind to it, but in captivity relapsing into quietness and melancholy. It is not very social in its free life; Hartmann says that the younger animals rove in parties of three or four; Wallace thinks that when fully grown it is a decidedly solitary animal, though he once saw two of them at play together. It is quite certain that they never form societies, a fact which seems strange to any one who has ever made friends with them in captivity. Cuvier says of one kept in Paris that it was peculiarly gentle, and that it loved companionship, making bosom friends of two kittens. It was, however, always ready to sun itself in the affection of one or two persons who were its especial favourites. Wallace's well-known experiences with a baby of the species (*Malay Arch.*, p. 42) suggest the idea of a very dependent, but likeable little creature. Brehm considers the orang to be slow and earnest-looking, the expression of its brown good-humoured eyes

being inexpressibly melancholy; he saw none that could be compared with the chimpanzee in sympathetic quality.

And indeed there is no doubt but that the gorilla and chimpanzee head the whole of the mammalia except man in their social feeling. Of the gorilla little is known, but that little is most favourable. He is confined to so small a region, is so rare and so shy even there; his strength is so great, his love of freedom so intense, his natural aversion so strong against those who tear him from his woods and his comrades that we should be very unreasonable if we were to expect him at once to develop a devoted affection for his captors. If the average London citizen saw his wife and family shot, and were himself cast into chains and carried off to be exhibited in a barred cage in a distant country, the scientific foreigner would diagnose his character as distinctly sullen and revengeful.

Only a dozen gorillas in all have been captured alive, and of these all but two or three have perished within a few weeks. One survived its capture nearly two years, and is the best known specimen of the genus. Falkenstein says of it that "it clung to human companionship and displayed a wonderful dependence and trustfulness, showing no trace of mischievous, malicious, or savage habits, though sometimes self-willed. Its good-humour and shyness, or rather roguishness, deserve special mention." The same gorilla was taken to Germany and lived for a time in the Berlin Aquarium. Hartmann there observed him and found him obedient and good-tempered, though rather mischievous. "On the whole," Hartmann says, "he behaved with propriety, playfulness, and good temper; there was much which resembled man in his look and bearing." Dr. Hermes, the director of the Aquarium, says of this gorilla: "He exhibits great sociableness towards children of two or three years; he is very amiable; kisses them, and lets them do anything with him without making use of his great strength. Older children he treats more roughly, though he plays with them readily enough and runs races with them round tables and chairs. He shows great tenderness in the company of ladies, and is highly grateful to them if they pay attention to him, placing his arm round

them, and leaning his head on their shoulders. He cannot endure to be a moment alone."

After the death of this individual, a second gorilla was obtained for the Berlin Aquarium. It lived but a short time, and Hartmann merely sums up its character as being "very playful and affectionate". (*Anthropoid Apes*, p. 267.) If there were more numerous and more extended opportunities of observation, the gorilla might possibly enough be placed at the head of all the lower animals in regard to social qualities; but, so far as our knowledge now goes, that position is properly claimed for the chimpanzee. According to Vogt, in its natural life, it lives in families which sometimes unite into larger troops, whose existence is, in general, merry and playful. Each family builds for itself a staging of boughs and leaves on the forked branches of some large tree; sometimes they roof this over as a protection from heavy rain. Savage considers that as a rule not more than from five to ten are seen together. Prof. Duncan (*Nat. Hist.*, i., 51) says that their life is very gentle and amiable, and marked by circumstances that indicate a mutual devotion.

But it is impossible that the free life of these shy denizens of the equatorial forests of Africa should have been much under competent observation. What we know of their disposition has therefore been learnt from their lives in captivity. Duncan considers the tame chimpanzee to be a most docile and obedient animal, capable of being ruled in all things by the voice of any one for whom it has acquired an affection. Vogt declares that "in captivity, to all who show themselves kindly and sympathetic, they exhibit the most touching and devoted attachment, and their amiability in playing with children is another conspicuous feature of their disposition".

Brehm considers them to be (i., 84) "gentle, wise and amiable". He kept several of them as inmates of his household, each for about a year. "Such an ape," he says, "we cannot treat as a mere animal, we must deal with him as we would with a human being. His body is that of a beast, his disposition is that of a crude man. He understands what is said to him, and we understand him also, though his speech consists

not in words, but only in accented notes and syllables, so full of expression that we cannot well mistake his meaning. He distinguishes between men and children; the former he likes, the latter he loves, unless it be a boy, for rough lads are apt to provoke and worry him."

"My chimpanzee knows his friends well enough, and distinguishes them perfectly from strangers, though he readily makes friends with anybody who approaches him kindly. He is most comfortable within the family circle, especially if he is allowed to roam from room to room, to open and shut the doors, and continuously amuse himself after that style. He is always busy in his investigation of every conceivable object; he opens the door of the stove to watch the fire; he draws out chests, rummages in them and plays with their contents. Praise always excites him, especially if it be given on account of his swinging and turning."

But to understand fully the sympathetic life of which a chimpanzee is capable, one must read the six pages of closely detailed description which Brehm gives of those he kept. Hartmann gives short histories of seven chimpanzees which he had known in captivity; he tells of one which died of grief at the indignity of being beaten. (*Anthropoid Apes*, p. 268.) Prof. Duncan gives two more cases, in one of which a chimpanzee developed a passionate attachment to a young negro, in another to an old woman who had acted as his nurse. Darwin gives Bartlett's description (*Expression of the Emotions*, p. 225) of the first meeting of two chimpanzees in the Zoological Gardens: "They sat opposite each other, touching one another with their much protruded lips, and the one put his hand on the shoulder of the other. They then mutually folded each other in their arms." Could Crusoe, meeting the first of his own species after a year of solitude, show more clearly at the first full-hearted moment the sympathetic yearning of human affection? There is something deeply pathetic in the simple account which Hartmann gives (p. 273) of the death of the well-known chimpanzee Mafuca. She slowly declined with consumption, and just at the end "put her arms round her keeper's neck when he came to visit her, looked at him placidly, kissed him three times, stretched out her hand to him, and died".

Social Sympathies in Man.

And yet nevertheless there is an advance when we cross the border line into the domain of the human species; for there are still richer capacities for sympathy in the case of even the lowest of the stunted savages, even the most naked, pot-bellied, spindle-legged, flat-nosed, wrinkle-faced of creatures. Though they roam the forest like the apes, with but a break-wind to shelter them from the weather, with wild fruits and small animals for their food, though they quarrel and fight, are truculent and despotic, yet the bands of twenty or thirty in which they rove are united by social sentiments of greater strength and complexity than any found in the lower animals. Not only is parental care more prolonged, but the family life is more compact, and probably more permanent. Much kindliness and mutual helpfulness prevail within the tribe, however hostile it may be to all without it. Casalis describes the Bushman as being "small with a flat dirty yellow face, the skin wrinkled like that of a frog". Yet he tells us that he is "kind, generous, and hospitable, readily dividing his food with the hungry". (Casalis, *Life in Basuto Land*, p. 158.) (*Cf.* Livingstone, *Miss. Trav.*; Featherman, i., 526.) Of the Negritos of the Philippines we are told by Earl that "though ferocious towards strangers they live in harmony among themselves; they are sincere in their social relations, and obliging in their habits".

Mouat describes the natives of the Andaman Islands (*Roy. Geog. Soc.*, 1862, p. 121) as being "a wild people, most savagely inclined to strangers, but most kindly disposed in their conduct to each other". He speaks of "this wretched population," diminutive in stature, and completely naked, "yet gentle and amiable in their mutual intercourse". Snow tells us (*Ethno. Soc.*, v., 45) that though they are like children, very passionate if thwarted in their wishes, they are extremely affectionate among themselves. Tennent describes the Veddahs as being gentle, truthful and honest; a great feeling of affectionate good-nature prevails in their little communities. The impression one gathers from Casati and Schweinfurth of the Akkas or pigmy tribes of Central Africa is that of a

bright, cheery good-humour, capable of much cruelty, no doubt, and unredeemed by any elevation of character, but with its own charm of impulsive, childlike affectionateness.

Moving a grade higher in the human scale, we find the same general tendency to social life in such races as the Fuegians, the Hottentots, the Brazilian tribes, the Tasmanians and Australians, but instead of being confined to small bands of twenty or thirty it spreads to tribes of 100 or more, and is more intense within the tribe. Darwin says of a Fuegian on board the *Beagle* (*Nat. Voy.*, i., 253), "His affections were very strong towards a few friends on board"; and of another he says, "The expression of his face at once showed his nice disposition; he was merry and often laughed, and was remarkably sympathetic with any one in pain". Darwin's little illustrative incidents (for instance, p. 277, edition 1889) suggest a truly feeling nature.

The Hottentots are described as being low both in morals and in intellect, yet in the natural affections they are far from deficient. "In the ordinary relations of life they were of a friendly, cheerful and amiable disposition, and lived together in perfect harmony. They were remarkable for their unselfish liberality, and their fervent attachment to their friends and kindred." (Featherman, *Social History of Mankind*, i., 501.) Bates, in his *Naturalist on the Amazons* (p. 366), says that though the forest Indians of Brazil are of a low type, very little removed from that of the brutes living in the same forests, yet "they have strong affections, especially those connected with the family". He speaks of a girl of one of the lowest tribes as "always smiling and full of talk". Wallace thus sums up the character of the same tribes (*Travels on the Amazon*, p. 361): "They show a great affection for their children, with whom they never part; nor can they be induced to do so even for a short time. They scarcely ever quarrel among themselves, work hard, and submit willingly to authority." Schomburgh's account of the Caribs describes them as a quiet, gentle, peace-loving race.

Of the Australians, Curr says (p. 274): "In their demeanour towards each other they were habitually courteous and good-humoured. Indeed, though their ways are different from ours,

it always seemed to me that the bonds of friendship between blood relations were stronger as a rule than among ourselves." Speaking of a tribe in which he moved freely for twenty years, Curr tells us that "a very noticeable feature of their economy was the harmonious way in which the individuals of the tribe lived together. During their games, constant peals of laughter burst from the merry throng. Eminently good-tempered and jocose, the black fellow is full of *bonhomie*, and, notwithstanding much that was degrading in his practices, he had decidedly something of the gentleman about him." (*Squatting in Victoria*, p. 298.)

The Rev. Mr. Taplin says of the South Australian natives (p. 8): "Amongst themselves there is a great deal of a sort of courtesy; they live in their camps without much disagreement". E. J. Eyre, who saw abundance of the blacks in their absolutely unsophisticated condition, and who is very far from concealing the many evil features of their life, speaks most decidedly of their strong social feelings. He calls them "frank, open and confiding, and easily made friends. When far removed from the abodes of civilisation, and accompanied only by a native boy, I have been received by them in the kindliest and most friendly manner. It is a mistaken and unjust idea to suppose the natives to be without sensibility or feeling," and the traveller narrates a case wherein a man burst into a fit of uncontrollable tears at the mention of a son of his who had died a full year before.

In short there is found in the humblest tribe of savages no small share of the capacity to bear and forbear, no slight measure of warm affection and of a natural humanity. The dance and the chant, the merry game and the funeral wail, their wedding festivities, and their care of the sick and the infirm, even though it tires at last in the case of the very aged or the chronic invalid, the festive ceremonies of naming, and initiation, the devotion shown by each to the other in battle, and the general cohesiveness of life from year to year mark in the poorest savages an advance, solid though not phenomenal, above the highest social life of the lower animals. The more closely we study the earlier stages of human development, the more will we be inclined to agree with the

eloquent summary of Tylor (*Anthropology*, p. 402): "Mankind can never have lived as a mere struggling crowd, each for himself. Society is always made up of families bound together by kindly ties. Their habits, judged by our notions, are hard and coarse, yet the family tie of sympathy and common interest is already formed, and the foundation of moral duty already laid in the mother's patient tenderness, the father's desperate valour in defence of home, their daily care for the little ones, the affection of brothers and sisters, and the mutual forbearance, hopefulness, and trust of all."

CHAPTER XI.

SOCIAL SYMPATHY IN MANKIND.

The Widening of Sympathy.

Among men the same general trend of progress continues, but greatly quickened, inasmuch as the social sympathies have now an effect predominating over all others in deciding which of many competing races is to emerge from the struggle. Thus it happens that changes in sympathetic temperament, which in the lower animals have required long and immemorial ages, are in mankind completed on a vastly greater scale in a few thousand years. In this chapter, therefore, and in the following, I shall deal with the upward growth of these sympathies in man, entering into a degree of detail, which, though still leaving the story but a sketch, may be in some measure proportional to the increased importance of the subject, and also in some sort of accordance with the greater wealth of materials now pressing upon us.

But in its essence the story is still the same; social sympathy still takes its rise in family life; still do we see the more specially preservative feelings towards child and wife spreading outward to embrace a wider area. They who love a child because it is their own may have by far their warmest fervour of devotion only for their own offspring, yet they will experience a certain predisposition to tenderness towards children in general; and this feeling indeed overflows the bounds of the species, giving rise to a certain compassionateness towards the young of all animals, so that we are conscious, just as the finer of the lower animals themselves are, of a peculiar melting emotion before the lamb, the duckling, the kitten, or the kid. Observe how the calf or

the puppy is fondled when the mature animal is neglected; or watch the delighted crowd which in a zoological collection gathers round the baby leopards or the new-born bear, and we shall understand how the primal sympathy of parental care has spread itself out in a general sympathy for tender years. Just as the little girl, when she lavishes untold affection on her doll of rags, is witnessing to the deepest treasures of inherent womanly nature, so does the whole race, by its mood of melting softness before all that is young, indicate how ineradicable has become the general operation of this emotion once so exclusive.

And the conjugal sentiment also tends to spread beyond the family limit, so that, apart from any trace of sensual feeling, men are touched by the sight of female beauty, and moved to generous emotion by the sight of a sex feebler than their own. When a man rises and yields to a woman, an utter stranger, his seat in train or tram-car; when he feels, as he sees a woman toiling at some coarse and unwomanly task, that he would like to set her free and himself undertake the drudgery; when, within the doomed vessel whose bulwarks are almost awash, he willingly helps to fill the last boat with the women, though fully realising that in a few minutes he himself will in consequence be a drifting corpse in the deep sea, in such cases he proclaims how, after a long story of slow development, that sympathy which was originally the finer side of mere sexual feeling has spread and spread till at last it extends to every one that bears the shape of a woman.

Preservative Value of Social Sympathy.

But while the social sympathies thus derive part of their primitive strength from the widening of other sympathies, they are in themselves also of sufficient preservative value to secure a growth of their own once a start is given to them. In a community of primitive form, where violent death awaits a man on so many hands, it is not only a deep comfort, but a means of safety to have a warm friend, ever true and trusty. Sir Richard Burton describes how among the negro races,

wherein the capacity of maintaining law and order is but little developed, there is a "passion for sociality" which drives them into the "saré" or oath of brotherhood. (*Lake Regions*, i., 102.) Little describes this as being very common in Madagascar. "It consists of a solemn vow of eternal friendship and mutual obligation, sealed by the act of solemnly partaking of each other's blood by the two contracting parties, by which act they become brothers." Robertson Smith describes it as a well-known custom of the Arabs, and it is still very frequent among the less settled of the Malay races. In history we often have occasion to note the effects of such unions. A somewhat similar feeling of brotherhood gave to Sparta her early predominance in Greece; while Thebes owed her short-lived supremacy to the brother-oath that bound her Sacred Band in bonds of indissoluble fellowship. Through all the turmoil of the early middle ages, it is easy to perceive the sledge-hammer effect produced by a chief who had for the nucleus of his army a band of "gesidhs" sworn to attend him, to defend him, and never to survive him; and Mahomet's followers altered the history of the world by the power of these sworn brotherhoods.

On the contrary, disunion has always been fatal. Could the Highlanders of Scotland have added to their reckless valour a capacity for solid union under one great chief, the part they were to play in the history of the British Isles would have been a very different one, and a much greater share of wealth and power and of consequent populousness might have drifted north. But, as Macaulay says (*History of England*, iv., 353, Cab. ed.), their armies could perform "incredible feats of arms," yet their most brilliant victories were always followed "by the triumph of the conquered and the submission of the conquerors," for the conquered were united, and the conquerors never were. "Local jealousies and local interests" dissolved the ill-cemented union of unsympathetic tribes.

The brilliant history of Rome is one long story of the triumph of union over disunion. Dr. Hearn in a suggestive passage of his *Aryan Household* (p. 265) says that "the folly of the different nations who allowed Rome to deal with them

one by one has been the subject of much sterile wonder. These barbarous tribes could no more combine for any great operation than they could make a chemical analysis. They were mentally and morally unequal to the task. Herodotus says of the Thracians that if they had but one head, or could agree among themselves, they would far surpass all other nations. But Thrace was not a country in the sense in which we use the term. It was the locality in which some fifty independent tribes were settled, every one of them in its structure and its social life having its own individual existence, and being complete after its kind."

The whole course of history is in its main features the emergence of the type that is capable of union, the subjugation, absorption, or often the total destruction of types less capable of consolidation; in other words, the emergence of the social as against the unsocial races in the long struggle for existence. One of the most suggestive chapters of the kind is that wherein Macchiavelli describes how Florence, during ten years of her peaceful harmony, all her factions reconciled, all her internal strifes composed, marched on to greatness and prosperity. "It is not possible to imagine," he says, "the power of authority which Florence in a short time acquired." (*History of Florence*, bk. ii., chap. ii.) But after these ten years, she became afflicted anew with the bitter discords of her citizens, and her greatness immediately declined. The whole history of the Italian peninsula from first to last is one long exposition of the truth that "Union is Strength," or in other words, when we apply the principle to living men, strong social sympathies are the most profitable means of progress that any nation can possess.

Within the tribe itself there are always forces at work which slowly tend to weed out the less social and leave the more social natures. They who think that the great strong bully is necessarily the surviving type in savage life are in a large measure mistaken. Such a man has predominance for a time, and he slaughters off other bullies who interfere with him or challenge his supremacy, but ere long he succumbs himself to the strength or fraud of some rival. Among ourselves the boxing championship does not adorn any individual for

more than a few years. Once he passes the meridian of his strength, some other at the age of maximum vigour wrests the belt from him. But in savage life such a fall most probably implies also death, and he who reads the story of barbarian conquerors from the fourth to the eighth centuries will notice how rarely the mere warrior type preserves his command and his life for more than a few years, ere he falls a victim directly or indirectly to his own love of violence.

In such a book as that wherein Captain Musters describes minutely the incidents of a twelvemonth spent within a Patagonian tribe, we see how steadily the big, powerful, but unamiable fellow disappears. One after another, as the year rolls by, the loud and arrogant braves descend to their blood-stained tombs, while a steadier control lies with him who is able to secure a following. He may often be such as we might not admire, but some of the qualities that make men liked must be his to secure the requisite devotion from others. Catlin speaks (i., 19) of the constant killing off among the Indian tribes of the quarrelsome, and I find references to several negro races that have existed within recent times, but which started their own ruin by internecine wars and slaughters, and were eventually exterminated or absorbed by their neighbours. "Savages," says Robertson Smith of the early Arabs (*Kinship*, p. 127), "well know the danger of quarrels within the tribe," and the records of the Malays during the present century tell of peoples who by reason of their innate ferocity have been wiped from the face of the earth.

Seeing then that man is subject in his own degree to the necessities of the struggle for existence, three being born where only one can survive, the type which has been emergent all along the line is the one that has, if other things were fairly equal, been most richly endowed with social sympathies, and the progress of mankind has in consequence been one of constantly increasing power of union. Hunter, speaking of the early peoples of India (p. 97), says that "the race progressed always from loose confederacies of tribes into several well-knit nations". These united again, until India reached her palmiest days, when all were cemented, even though badly cemented, into the great Mogul Empire. So do

the early historians describe the progress of China, and Cox, in his *History of Greece* (bk. i., chap. ii.), relates how, in the beginning, the Hellenes started from scattered families, then joined in phratrias or brotherhoods; these formed the wider tribes, and finally many tribes contrived to live peaceably within the same polis or state. How isolated were these states; what dissensions reigned between Attica and Sparta, Corinth, Argos and Bœotia, Locris, Doris and Arcadia, every one knows. But when the Greeks of the various states began to be capable of meeting without fighting, when they knew the patriotism of a common language, common religion, and national games, they formed leagues of greater strength, and if they could have learnt the lesson of hearty and trustful union of the whole, the history of the world might have been different, with the predominance of their race assured. As it was, the degree of combination which they attained under Alexander shivered to pieces the ill-cemented Persian empire, yet the Macedonian dominion itself crumbled away before the attack of the Romans, incomparably the best united and most strongly consolidated of these ancient peoples.

Gaul fell a prey to the Romans for want of union; in spite of her millions of people, she rarely numbered 500,000 in any solidly united community. Had they formed a mutually trustful confederacy, Cæsar would have been powerless against them. So too of the Germans. Mommsen says that in 50 B.C. they were "at that stage of culture in which they had as yet no national union," though they formed populous organisations, averaging somewhere about 500,000. England shows very clearly this process by which men grow more social, and therefore better qualified to live together and prosper. The first fleets of the Saxons landed many petty tribes, each to dwell on the soil it had seized from the utter disunion of the Britons. But the process of conquest demanded heavier blows than small tribes could deliver. Those were the most successful who were the most capable of consolidation. Some eight or ten amorphous states began to emerge, and in the course of a couple of centuries secured predominance. Yet England was of no weight as a whole; the national strength being spent in awful scenes of internal warfare. But the

kingdoms most capable of joining or of being amalgamated increased in strength, and in 800 A.D., under a single overlord, England was nominally one, though weakened by Welsh, Cornish and Cumbrian enemies, and itself but poorly united. The sympathy which bound Northumbrian to Kentishman was almost infinitesimal; and Dane, Angle, Jute and Saxon dwelt together with never-ending bloodshed. Sieges of houses, capture of villages, theft of cattle, burning of crops, slaughter of men and ruin of districts paralysed the people's efforts, wasted their substance and absorbed their powers. On this loosely united mass the first smart tap of a Norman host, far more blest with the strength which loyalty, discipline, and hearty co-operation can supply, fell with a shattering force. Subsequently the whole story of Norman and Plantagenet England is the struggle of consolidating against disruptive forces, the central power constantly striving to weld the people into one strong whole, the barons as steadily seeking the selfish glory of local autocracy. But the social sympathies were vital enough to slowly make for union; and a central power, under fair control, as we shall see, of the general will, asserted its supremacy. When the Tudor times arrived, England was strong in that patriotism which united all her sons from Cheviot to Channel as brothers, and only in proportion to the growth of that social feeling was England's prosperity apparent at home, and her influence felt abroad.

Ireland lost her liberty through want of union. Scotland nearly lost hers through the disunion of her aristocracy, but when the case was desperate, she retrieved herself through the capacity for patriotic union displayed by her common people. At a later date in proportion as all the people of the British Isles were found capable of harmonious union, so did the strength and prosperity of the whole progress. Without any exception, through all the ramifications of history, this truth is plain, that the less social type yields before the more social.

Increasing Size of Social Unions.

This absolutely undeviating law of progress is seen in a consideration of the size of the community that is character-

istic of any stage of human development. The lower savages combine in hordes numbering from twelve to eighty, the average being about forty. Burchell (i., 291) reckons a Bushman community to range from fourteen to forty; Earl considers an average Negrito tribe to number twenty-five, though sometimes it may reach to fifty. The Veddah tribes number sixty persons each, and the Semangs of the Malay Peninsula from twenty to eighty; while the Andamaners are the most social of this grade, their communities reaching to eighty or even 100 persons. These tribes are incapable of further union for any common purpose, and the numbers mentioned seem to be the extreme limit of their capacity for combination.

The middle savages, on the average of six races, reach about 150 as the social unit. The Tasmanians, according to G. A. Robinson, the protector of the aborigines in 1830, averaged nearly 300 to a tribe, while the Fuegians rarely exceeded forty. (*Fitzroy*, ii., 178.) The Australian blacks are estimated to have averaged about 150 to each community, though a slight degree of cohesiveness was sometimes seen in two or three neighbouring tribes. The Hottentots, when originally known, were in tribes of from 100 to 400; the forest tribes of Brazil range from 100 to 300, and the Ainus of Japan present communities not widely different from these in size.

The upper savages, as typified by the North American Indians, would average about 360 to an encampment. Schoolcraft's tables show that the different communities ranged from 130 to 700, but these were capable of some union among themselves, forming confederacies that ran up to several thousands, the average of sixty-five confederacies being about 4000 persons to each, according to the United States census of 1848. This description applies to the Eskimos, Koniagas, Aleuts and all of the other allied races of the north, and also to the higher savages of South America. The Patagonians and Araucanians, for instance, formed roving communities of several hundred persons, but these were sometimes joined into loosely cemented leagues, which, according to Captain Musters, would average nearly 3000 persons; he speaks of one chief

who could assemble a force of 1500 men, the confederacy in this case being consequently more nearly 6000 persons. The Damaras and other negro races on this level form tribes of about 300 persons also capable of forming leagues.

This growth of social feeling assists in the conversion of men from wanderers into settled populations. For co-operation makes a little agriculture possible, and when the tribe is no longer dependent for food solely on the natural products of the forest, it has less cause to rove, it builds better dwellings, and lives adjacent to the food supplies of its clearings. Moreover, when the loose confederacies of several thousands, such as the higher savages are capable of, have become well knit together by long contiguity and a more settled life, the weight of the mass lends it safety. The ruin of a community is now no more the result of a night surprise, or of a single battle. Military expeditions become campaigns, and the dwellings of the people in villages begin to be fortified. As a result we find that communities of several thousands become the predominant feature of the lower barbarian life, these forming not merely alliances of different peoples, but single, well-united nations.

For instance the Maoris, who were a fair type of the class, averaged about 4000 to a community when first well known. The total number is estimated at 100,000, and these were divided into nations variously described as from eighteen to twenty-seven in number, the average of five statements being twenty-two, which would imply about 4500 persons to each nation. Morgan speaks of the Iroquois Indians as having numbered 70,000 people divided into five nations, which would give an average of 14,000 to each. The number is probably an excessive estimate, but he mentions one village of nearly 3000 inhabitants, a population which, if true, is indicative of a high capacity for social life; in consequence of which they were in the fair way of conquering the whole of the races on the eastern sea-board of America when their career was cut short by the arrival of the European population.

An enumeration of the warriors of the Dyaks gave to five tribes an average of 820 each, which would make the unit of

social cohesion about 3000 persons; and the Tatars upon the lower barbarian level muster somewhere about 2000 or 3000 in a community. In New Guinea, New Hebrides, and the other islands peopled by the Papuan race, as Turner tells us (p. 84), the villages of 80 to 100 individuals are governed each under its own petty chief, but from six to ten villages are solidly united in communities that are under a single head-chief whose power has a tendency to be hereditary. The social unit among these people is probably more than 1000. Among the Kaffirs, each village of about 200 persons is under the rule of a chief, but all these chiefs are strictly subject to a head-chief or king whose laws prevail through the whole of a wider community which may be reckoned at from 2000 to 20,000 persons. However, as the fortunes of war fluctuate, the numbers within any one kingdom are constantly varying.

Among the middle barbarians we find very much larger associations, accompanied by more permanent dwellings and more efficient agriculture. The great bulk of this grade consists of the negro races of Central Africa. I have gathered the estimates, made by travellers, of the numbers in each of thirty-five well-defined communities of these people, and they give an average of 228,000 persons to each. When the Fijians were taken over by Great Britain they formed a community of 146,000 persons under one king. So in Samoa, the whole 36,000 people whom the islands could support were under the control of one fairly vigorous central power.

There is a great jump therefore in the capacity for social organisation between the lower and middle grades of barbarism. But on reflection this is seen to be inevitable. For at a certain stage of development one union compels others. If a solidly integrated state has reached the number, say of 100,000 people, it begins to find that warfare is most efficiently carried on with a professional or semi-professional army. If it puts 5000 men in the field, it leaves four men at home to support every one that goes abroad; and, when there is a solid enough mass left behind to form a steady basis of operations, such a force carries all before it. Warfare ceases to consist of border forays, or petty hostilities. The Maori tribe fought with its neighbours, it knew nothing of those at the

other end of the island. But the negro king who has a few thousand professional soldiers at his absolute disposal carries his conquests far and wide. He compels other tribes to consolidate; otherwise they are destroyed or absorbed within his own community. But there is a limit roughly set to the extent of this amalgamating process; for in a land devoid of good roads, and at a stage of civilisation wherein the means of transport are in general rude, the efficiency of an army beyond a certain limit is by no means proportionate to its size, and it will certainly happen that 20,000 men well fed, and in good communication with their base of operations, will in the end baffle a force five times as large, if it is ill supplied and in excess of its means of transport.

But some of these negro states contrive to embrace nearly 1,000,000 inhabitants within a single fairly consolidated state. They can put into the field for a brief campaign, if it is not too far away, nearly 100,000 men, inclusive of 15,000 cavalry. Such an empire, though perhaps cumbersome and unwieldy by reason of its crude capacity for organisation and administration, speaks of increasing powers of social union. Moreover, village life begins to expand into town or even city life. No savage knows anything of either of these, while the lower barbarian, as a rule, never forms a village of more than 1000 persons, that of the Iroquois with 3000 being the largest on record. The negroes, however, and other races on the same level, are capable of building and organising towns of 10,000 to 30,000 inhabitants. The chief town of the Latookas has about 12,000; and Abomey, the capital of Dahomey, has, it is estimated, more than 25,000. Some of the African states have as many as half a dozen towns apiece, ranging from 5000 to 30,000, and it indicates a huge advance in social feeling and the capacity for organisation that negroes can dwell in associations so large and so intimately united. Quite a gulf must divide the Bushman and the neighbouring negro, a gulf that is founded on fundamental nervous differences; for the one has shown himself incapable of learning from the other the lesson of social co-operation. And indeed it is not so much a lesson that is to be learnt, as a nature that is to be acquired.

In the higher barbarians we reach a still greater degree of social union. The island of Madagascar, with 3,500,000 people, formed, when first observed by white men, but a single state under the one sovereign, who resided in a capital numbering nearly 100,000 inhabitants. The Malays form states that range from 250,000 to 1,000,000 or 2,000,000 people. In Java about 5,000,000 were divided under twenty different rajahs; in Sumatra the independent states averaged 400,000 persons to each; in Celebes they are estimated to have averaged 600,000; while on the Malay Peninsula they range from 100,000 to 500,000. In Abyssinia 3,000,000 people are divided into three independent states; and among the Tatar races, the Turcomans for instance, a single khan may have as many as 3,000,000 under his rule, while others have not a twentieth of that number. They average, however, about 500,000. Taking the best numbers available for what they are worth, I find that the average of sixty-one independent states of the higher barbarian level is 442,000 persons. They have at least three towns estimated to contain over 100,000 inhabitants, and about a dozen which exceed 30,000.

Again we make an upward stride when we move into the rank of the lower civilisation. I reckon, in a somewhat arbitrary way perhaps, some twenty-three states upon this level. Most of them have been, during the last half-century, absorbed into the empires of the European Powers; but taking the estimates about the time of the annexation of each, they seem to have averaged about 4,000,000. They had towns running up to 250,000 inhabitants, at least so the estimates stood for two of them, and eight others were supposed to have over 100,000 each.

In the middle civilised, such states as Siam, Burmah, Persia, Afghanistan, and so on, there appears a degree of social cohesion sufficient to unite populations never less than 4,000,000 in number, and reaching a maximum of 10,000,000, with an average of 5,000,000 or 6,000,000. They have cities such as Bangkok which approach a population of 500,000, while others range between 100,000 and 200,000. The higher civilised races aggregate for thirty independent states about 720,000,000 persons, or an average of 24,000,000 to

each. They have four cities of 1,000,000 inhabitants, and fourteen estimated to contain at least 500,000. It is impossible to realise all the play of co-operative exertion, the mutual forbearance, the interdependence of each upon all the others that are implied in the residence of 1,000,000 people within one closely packed area.

China, and also India, as it was under the Mogul emperors, rank as the most populous empires that the world has ever seen, and if mere numbers could alone determine the degree of social combination, they would represent the highest achievement which mankind has yet attained in this regard. But they have never exhibited the consolidation which marks the great empires of the cultured races. These number fourteen, and possess, according to the *Statesman's Year Book*, a total population of 420,000,000, which gives to each an average of 30,000,000. Their cities present incomparably the most wonderful social life that the world has ever witnessed. London with nearly 6,000,000, Paris and New York with 2,500,000 each, their orderly populations living in a harmony from which internal warfare is utterly absent; all working into each other's hands; all fed, clothed, educated, amused, and provided with a thousand comforts and conveniences by the easy play of co-operative forces; these are as yet the triumphs of social sympathies. In these races of the lower culture no less than 30,000,000 people dwell in cities of over 250,000 each, there being fifty-three such cities which average 623,000 inhabitants apiece.

The centuries that are coming are sure to witness associations to which these will seem but small concerns, for still the empires grow, and still do the instincts of people lead them to mass themselves in ever larger cities, thereby to reap in the fullest measure all those advantages of social sympathy which arise when man dwells beside man to comfort and be comforted.

The examination thus slightly sketched out has, in its classification, the defect of some arbitrariness, and in its numbers the drawback in many cases of mere estimates, where we might wish statistics, but accuracy is of small importance to this part of our inquiry, and it is abundantly

certain that as man progresses, so do his social instincts triumph. At what rate the progress advances may be seen in this little recapitulatory table.

Lower Savages,	average of	8	races,	40.		
Middle Savages,	,,	6	,,	150.		
Higher Savages,	,,	33	,,	360.		
Lower Barbarians,	,,	30	,,	6500 ; towns up to		1000.
Middle Barbarians,	,,	35	,,	228,000	,,	20,000.
Higher Barbarians,	,,	61	,,	442,000	,,	100,000.
Lower Civilised,	,,	23	,,	4,200,000	,,	250,000.
Middle Civilised,	,,	8	,,	5,500,000	,,	400,000.
Higher Civilised,	,,	30	,,	24,000,000	,,	1,000,000.
Lower Cultured,	,,	14	,,	30,000,000	,,	6,000,000.

Herein we may compendiously see how steadily men have availed themselves of the advantages of combination in proportion as the advance of social sympathies has rendered combination a physical possibility. For all such capacity is a growth. It would be utterly impossible to teach 1000 Fuegians or Australian aborigines to dwell together harmoniously in one town ; it would have been utterly impossible to have formed a solid and permanent army out of 100,000 Highland clansmen. It was found utterly impossible, in any of the forty-five socialistic communities of America, chronicled by J. H. Noyes, for an average of 198 persons to live in the same dwelling or on the same farm, enjoying a perfect community of possessions, and forming one single enlarged family. Though the members came together with boundless enthusiasm, the communities lasted on an average a little less than three years. They had greatly over-estimated even the nineteenth-century capacity for social sympathy possessed even by cultivated men and women, and had forced themselves into an intimacy of union which will be possible, if ever, only in centuries to come, when the average human temper shall be much more developed and sweetened.

Social Sympathy Begins by being Deep but Narrow.

In all cases social sympathy is a growth, and men will instinctively take advantage of its benefits up to the full measure of the faculty which they possess. If they are slowly

and silently drawn together by mutual attraction, they form a solid and permanent mass; but no sort of external compulsion nor any artificial contrivance will hasten the process. The growth is one that is never ceasing, yet never seen; a year or twenty years, as they roll by, leave no appreciable change, yet the centuries mark the silent progress that has been made. And this progress is due to the one persistent fact that the elimination of the unsympathetic of each generation leaves the next one on the average more sympathetic. If we did nothing but hang or incarcerate all the murderers in our midst, the uniformity of the action, though tediously slow, would yet be surely felt. The process, however, is far more decided than this. Not only is the careless father, the unkind husband, less represented in the succeeding generation than his more sympathetic fellow, but the very quarrelsome man, the utterly selfish citizen, is knocked on the head, or outlawed, or imprisoned, or otherwise elbowed out of the throng of men who find it pleasant to dwell together in unity, and who, in ways often imperceptible to themselves, contrive to jostle out the atom that jars with the others.

I now purpose to examine in moderate detail the stages by which this process has advanced. And at the outset it will be necessary to observe the sharp contrast which exists between two different directions of progress, whereby, on the one hand, the social sympathies have deepened, and on the other hand have widened. The two processes advance by steps which are in large measure independent, and the former is always the earlier. Sympathy must deepen before it can widen. The ordinary savage feels much devotion towards those within his tribe, but he spears or brains the outsider without compunction. The Scotsman feels his heart warm at the hand-grip and at the Doric accent of a brother Scot, when he is indifferent to Frenchman and Italian. Sir John Hawkins was a man so tender-hearted that he spent his fortune in founding a hospital for decayed sailors at Chatham, yet that fortune was acquired by his skill in originating the English traffic in negro slaves. His heart could be full of compassion for a kindly Englishman, especially if he were a sailor, but

his sympathetic feelings could not cross the boundary of colour; and a trade, in which 300,000 negroes were during his lifetime torn from their homes and carried amid scenes of dark atrocity to be sold as cattle in far lands, had in it no suggestion of cruelty, merely because the men were so widely alien.

In the simplest and most natural form, social sympathy is dependent on daily intercourse; we grow to like those with whom we live, and a savage horde of fifty people, consisting of persons who have grown up in close association through all the length of their lives, will most naturally be knit together by strong bonds of internal attachment. But to the neighbouring horde they have no friendly feeling, for all savages suffer severely at times from famine, and though the individuals within the little tribe may have learnt to share with each other, and though the play of family and social affection may forbid as a rule that one should starve while others have enough, it is not so between tribe and tribe. What one takes the other loses, and each must either learn to assert its claim or go without. Every spot where game is more than usually abundant becomes a cause of contention, every valley wherein edible roots are easily gathered, every stream that is well stocked with fish, helps to engender bad feeling; and if one tribe should kill a man of the other, the very strength of the social feeling will set the injured community athirsting for revenge, retaliation being, as we shall see (chaps. xx. to xxiii.), a necessary fundamental feature in every man. But without further elaboration, it is easy to understand how tribe must jostle tribe, and how along with powerful sympathies to those within the tribe, there are sure to go hatred and hostility to those without. And even when the social feelings have so far triumphed as to bind some millions of people together in one great nation, the same contrast is to be observed: German loves German with a patriotic fervour, and Frenchman cherishes for Frenchman a deep devotion; yet in each nation men are filled with the notion that the others are aliens, seeking to do them harm wherever harm is possible, and therefore to be watched and suspected.

Hence arises that type which for so long has filled the

minds of men as the manly ideal: the hero, gentle to all within the community, and fierce to all without; the man who is true to his kindred, loyal to his country, but deadly to the foreigner. We shall fail utterly to understand the strange features of the development of social sympathy unless we perceive how the necessities of the case have thrust these two apparently incompatible qualities into juxtaposition; how the perfect knight should be gentleness itself to all within, and ferocity personified to all without. But such have been the needs of the struggle for existence, a race surviving only if it could hold well together within itself, yet fight with relentless destructiveness against competitive races without.

In "Cymbeline" we have one of hundreds of passages in which the poets have enforced this strange blending of opposite qualities, as the highest type of character:—

> Oh thou goddess,
> Thou divine Nature, how thyself thou blazonest
> In these two princely boys. They are as gentle
> As zephyrs, blowing below the violet
> Not wagging his sweet head. And yet as rough,
> Their royal blood enchafed, as the rudest wind
> That by the top doth take the mountain pine
> And make him stoop to the vale.

Starting then from this fundamental fact that those within the tribe are friends, those without it presumably enemies, we have to trace two processes. In the first, the friendliness and devotion within the tribe grow stronger and deeper; in the second, the area over which a man can extend firstly his toleration, then his friendliness, and lastly his feeling of brotherhood, expands in the measure already seen in our numerical comparison. In the remainder of this chapter I shall deal as fully as my limits will permit with the former process, but only partly with the latter, leaving to the next chapter the story of the widening of human sympathy beyond the bounds of tribe, of race, of language, of faith, and of colour. In this chapter, then, I shall indicate how within the tribe kindness grows prevalent, humanity increases, and patriotism develops; how, as the tribe widens into the nation,

feelings of loyalty gather a useful intensity, and how the capacity for obedience increases so as to emphasise the general harmony. But as these can be but sketches, I shall subsequently choose a single line of inquiry to be followed in more detail, and by examining the treatment of the sick and feeble in each grade of progress, it will be easily possible to show how steady and marked has been the growth of a general feeling of humanity.

Social Sympathy in Savages.

Among the lower savages we find in all its simplicity the condition already described, the tribe of fifty persons being solidified by strong affections among themselves, and also by the pressure of a deep hatred for all without, a hatred most cordially reciprocated. Livingstone relates the chuckling satisfaction with which the Bushmen would recount the number they had killed of men, women, and children, belonging to other tribes (*Miss. Travels*, p. 159), but they never learnt the deep blackness of hostility which led to cannibalism. Earl tells us that among the Negritos of the Philippines, whenever a man dies, his relations must go off and take the life of some man in a neighbouring tribe. (*Races of Indian Archipelago*, p. 125.) In varying measures the same is true, or at least is known once to have been true, of all these lowest races of mankind, and yet we have seen, at the close of the last chapter, that they live in great harmony and good-will among themselves. The Bushmen, according to Burchell, are capable of a most impulsive and affectionate generosity. The Veddahs are quiet and gentle in their tribal life, and the Andamaners, though "noted for their audacity and implacable hostility to all strangers" (Snow, *Ethn. Soc.*, ii., 35), are praised by every observer as being "gentle and amiable in their intercourse with one another". (*Royal Geo. Soc.*, 1862 p. 121.)

In the case of none of these lower savages does cannibalism occur. Strange to say, that is not a feature of mankind in its very earliest stage. Enmity requires to

deepen and blacken ere a people can so far conquer the useful instinct displayed by all the higher mammals of aversion to the flesh of their own species. But it is to be remembered that, while progress kindles warmer fires of affection within, it bids in earlier times a fiercer fire of enmity flare up against all without, so that cannibalism and head hunting are characteristics of a certain degree of advancement; they begin at the stage of the middle savage; reach their culmination among the lower and middle barbarians, and thenceforward steadily die out.

Cannibalism, as a systematic practice, is the result of savage warfare and revenge. Sometimes near the lowest level of mankind it occurs, not as a practice but as a last resource amid the intolerable gnawings of continued famine. Thus Fitzroy relates how in such circumstances the Fuegians suddenly kill the old women of their party with a blow from behind, and eat their bodies (vi., 183). But Snow expressly tells us (*Ethno. Soc.*, i., 264) that they are cannibals, not from choice, but only as a dire necessity. Darwin, however, suggests that, even at this level, revenge plays some part in the practice, for he says "the different tribes when at war are cannibals". In regard to the naked savages of the Brazilian forests, Bates (*Naturalist on Amazons*, p. 382) mentions two tribes, and Wallace (*Travels on Amazon*, pp. 347, 353, 359) three others, who eat the bodies of the slain if there be any pressure of hunger.

In the great majority, however, of the middle savages, no large part of the body of an enemy is eaten, but only some portion of it which may express the hate and vindictiveness of the conqueror. Among the Australians, only the kidney fat, as a rule, was used in this way. The tribes of Queensland seem occasionally to have approached to something in the way of a cannibal repast, but neither in Tasmania nor in Australia was it customary to devour a human body. I find no charge of cannibalism brought against either Hottentot or Ainu, so that we are justified in looking upon it as a practice only dawning at this stage of advancement.

Nor does it become a feature of ordinary life even among the higher savages. It occurs, but by no means commonly,

among the North American Indians, with whom, as Schoolcraft explains in the case of the Comanches (i., 235), the eating of a part of the flesh of a dead enemy "was a metaphysical passion rather than a brutal appetite". Bancroft declares that the Tinneh, one of the chief tribes of Canada, in times of terrible starvation used to drift into cannibalism, and he considers the natives of the Darien peninsula to have been more or less addicted to the practice; certainly, when Columbus first visited the Carib population, they seem to have been decidedly cannibal in some of their practices.

When therefore the Marquis de Nadaillac gathers the evidence that the neolithic inhabitants of Europe were cannibals (*Manners and Monuments of Prehistoric People*, English trans., p. 51), and Vogt asserts this custom among the earliest known races of Belgium (*Lectures on Man*, p. 346), they are not thereby proving these people to have been on the lowest grade, which is either not at all cannibalistic or only so to a slight and occasional extent. So far as I can discover, the habitual practice of cannibalism occurs in only seven out of forty-six savage races, and in none of these is it ever extensive. No savage race will of its own free choice feast upon a human body; that revolting indulgence of ferocious hate belongs to the two grades next above the savage.

But savages, even though little addicted to cannibalism, have their own development of ferocious hatred for those outside the bounds of the community. The North American Indian, however peaceful and loyal within his tribe, thirsts for the scalps of all that are without, and his noblest ornament is a long fringe of human hair attached to his person or his dwelling. No young Sioux warrior was likely to find a girl who would marry him, till he had scalped a man; over his grave would be recorded as the height of his glory the number of men, of women, and even children, whom he had slain outside of the tribe. This is true of the savage wheresoever he is found. The Nagas among the hills of Assam, the Alfuras of Ceram, and the aboriginal tribes of Formosa (*Roy. Geo. Soc.*, 1889, p. 229) are expected to bring in the gory head of at least one stranger before it is worth their while to think of marriage. No girl would look at a youth who had not

begun his career of slaughter. In Australia, the most glorious moment of a man's life was when he slit open an enemy's side, and tearing out the fat in which the kidneys are embedded, ate a mouthful and smeared his body with the rest.

In India, we know how the aboriginal races on the savage level thirsted for blood. Sir Joseph Hooker quotes Major Sleeman (*Himalaya Journals*, i., 60) to the effect that "an annually returning tide of murder swept unsparingly over the whole face of India," but we are told that each of the savages abstained from killing "in the immediate neighbourhood of his own village". His innate ferocity was directed solely against the stranger. One of these "Thugs," caught by the British, had a record of 931 murders; and out of a tribe numbering about twenty men the least successful had taken twenty-four lives.

Among savages all this ferocity will, up to a certain point, have its advantages. If the stern alternative is to slay or be slain, to starve or appropriate, then the active, bloodthirsty race will clear away the gentler and more apathetic, thereby securing more room for itself. But the matter is easily overdone; a restlessly aggressive and murderous race may draw upon itself so peculiar a detestation, that in the general enmity it may be crushed out of existence. And this is the more likely to be the case if its neighbours are in advance of it in civilisation, so as to be better armed and combined in larger numbers. For instance, the Negritos of the Philippines are dying out because of their head-hunting customs. "The practice," as Earl says, "leads to their being abhorred by all the surrounding races, and will end in their extermination." In Victoria the Government spent £60,000 a year on the natives, or at the rate of £10 a head, and had five zealous protectors to conserve their rights; yet, when tribal bounds were disturbed by the advent of the white men, mutual feuds among the tribes largely assisted in annihilating the race.

In one tribe alone of Indian Thugs the British authorities hanged 200 men out of 600, and all the rest except seventy were transported. There is fairly good reason for believing that if the Indians of North America had thirsted less for scalps they might now have been a tolerably numerous and well-settled race.

But all this growth of ferocity is in the main reserved for the outsider. Within the community there is the steady development of affection and harmony. Lewis and Clarke, speaking of Indian tribes who in 1804 beheld them as the first white men they had ever heard of, tell us (p. 40) that the "Indians are very generous and hospitable. So readily do they give and take among themselves that there is almost a community of goods." L. H. Morgan speaks of their "unbounded hospitality," and Schoolcraft (ii., 64) declares that "the character of the Indian in domestic life is forbearing, not easily vexed, but almost habitually passive". Again (ii., 74) he tells us that "the most perfect sincerity and cheerfulness prevail, and their intercourse is marked with the broadest principles of charity and neighbourly feeling".

Of the Eskimo, Nansen says (*Greenland*, pp. 170, 172): "There is a frank and homely geniality in all their actions which is very winning and can only make the stranger feel thoroughly comfortable in their society. In our tent the best of understandings seemed to prevail among the many occupants." Musters, after living a year as a semi-naked denizen of Patagonian tents, deprecates the contemptuous terms so freely bestowed upon savages. He found them "kindly, good-tempered, impulsive children of nature, taking great likes and dislikes, becoming firm friends or equally confirmed enemies. In my dealings with them I always was treated with fairness and consideration."

Similar testimony is given by Bates and Wallace as to the general good-nature of daily life in a Brazilian tribe. In Watson and Kaye's elaborate account of the peoples of India, race after race, whose ferocity to all outside their own has been notorious, is described as "mild and gentle among themselves," and we are told that "great kindness prevails".

That this kindness is something more than a mere animal good-humour, yet that it has its limits, is clearly seen in considering the treatment of the sick and feeble among savages. Up to a certain point they are always well cared for; but the patience of a wandering tribe in course of time always becomes exhausted. The Bushmen, when an old person has for a while been a burden, abandon him in some convenient spot

with a little food and some water (Kolben, *Cape of Good Hope*, p. 321), and Lichtenstein corroborates the statement: "As soon as they perceive a sick man near his end, he is carried to some solitary spot, a fire is made and a vessel of water is set near him". (*Travels in South Africa in* 1803, i., 258.)

The Australians, though they "show a great amount of sympathy with sick people" (*Nat. Tribes of S. A.*, p. 225), generally put the aged to death. The practice is described by Dawson, Smythe, Curr and other recognised authorities. Dawson asserts that the insane are killed, and Curr describes as a typical case the fate of an old woman whom he knew. She was still hanging about the tribe "when reduced by age to be little better than a skeleton, imbecile in mind, hideous in person. She was allowed to follow the rest, it is true, but met with scant assistance. She on the other hand was patient and uncomplaining, with an interest in the children and a civil word for all." At length she became too feeble to walk, and her groans at night became distressing; so the tribe built a pile of dry wood, laid her on it, and set fire to it. They went upon their march, and shortly afterwards the white man found the half-charred body still lying on the embers. When he next met the tribe, they made no concealment of the fact that she had been burnt alive. It was the custom of her race, and her groans had frightened them.

Kolben tells us that among the Hottentots (i., 319) a special hut is built for the abandonment of the aged, but no son is allowed to build one or leave his father in it till he has obtained the consent of the tribe, which, however, is rarely refused. The Damaras are, of all the negroes, the race most truly on the savage level, and Galton describes their great want of compassion for the sick. When diseased or old, a man is pushed out of the camp, and left to die of cold, or by the jaws of wild beasts. "They kill their useless or worn-out people; even sons smother their sick fathers," and he describes an atrocious incident of which he knew. (*South Africa*, chap. iv.)

I have found express testimony to these loveless habits in

twenty-eight different races of savages, and for only one have I found the practice denied. Among the North American Indians it was everywhere customary. Lewis and Clarke describe it minutely among the Chippeways, and a well-known passage of Catlin makes us vividly realise it among the Sioux. There, he says, it is so well understood that the aged themselves insist sometimes on being abandoned, saying "they are old and of no further use; they left their fathers in the same manner, they wish to die and their children must not mourn". Catlin gives a picture of a case he knew: a chief once considerable in his tribe, reduced by age and disease to merely skin and bones, left lying beside the flickering embers, with his dish of water and small store of food beside him. A few months later Catlin passed that way, and saw the poles and the buffalo skin, the half-burnt firebrands and the skull beside the wolf-gnawed bones.

The Eskimo had the same practice. Hartwig (*Polar World*, p. 334) and Hall (i., 103) describe the pathetic sight of a female skeleton lying as the sick woman had been left, three years before, her lamp by her side, and her little properties gathered around her. And yet we see from Schoolcraft (iv., 67 and 56, also v., 179) that the North American races were capable of much tenderness in their nursing of the sick. So also the people of Kamschatka can be very kind, but they abandon the feeble and the aged. (Spencer, *Desc. Sociol.*) Likewise do some at least of the Siberian tribes, while it is well known that the Guiana and Columbian tribes of South America used to sling the sick in a hammock, leaving them with a four days' supply of food to die in the forest.

The savage, therefore, has his virtues and he has his vices. He has a considerable amount of that social sympathy which is essential to the cohesiveness of successful human life; but his kindness even within his own tribe has its limits, while his habitual attitude towards all that is without the tribe is defiance and ferocity. But the feature which most clearly indicates how slow is the development of the higher class of social capacities among savages is their want of any settled system of government. In the lower savages, the tribe is

organised as is the troop of apes or monkeys; the strongest old male gains by his strength a certain ascendency which he maintains so long as his bodily vigour exceeds that of any other male. In the middle savages there are still no chiefs in the proper sense of the term. All the writers, now regarded as authorities with regard to the Tasmanian and Australian races, caution us against the mistakes into which the early voyagers were betrayed by their antecedent notions. There is no chief, although one or more individuals generally possess a certain ascendency. If half a dozen of ourselves were going off for a walking trip the greater experience or activity or self-assertion of some one would give him insensibly a sort of leadership, but that would be a very different thing from his being constituted the ruler of the party with a coercive authority. So in an Australian camp, no one is bound to obey any other further than he pleases, but there are always a few who naturally take the lead, and sometimes one man may so overtop the others in the deference willingly yielded to him, as to become in a mild way a kind of dictator. A. W. Howitt says that such a position is not infrequently held by a mere bully, but very much more often it is gradually won by some elderly man whose bravery and wisdom happen to be combined with a kindly way and a considerateness which wins affection. For the man who can gather half a dozen devoted followers is stronger than the most powerful man who has to rely on his own right hand alone.

The Fuegians are described as being on a footing of equality among themselves, except in regard to the deference which all are willing to pay to the one who naturally grows into the position of leader; and though the early travellers spoke of chiefs among the Hottentots, we now know that these were men of only a very limited authority. So also among the forest tribes of Brazil, as Wallace relates, though they have chiefs whose power is hereditary in the male line, yet the control of these is very slender, being confined to certain definite spheres in which it is convenient to have one to act as spokesman or manager on behalf of all. This absence of recognised government is characteristic of a low degree of social cohesiveness.

In the higher savages we approach nearer to the ordinary idea of a chief, though still the true feeling of the community is republican, the leader having no personal claim upon the obedience, much less upon the loyal devotion, of any other member of the tribe. Schoolcraft describes the government of the North American Indians as residing in the council of warriors; an elderly man, whose courage and exploits have given him a standing in the tribe, is certain, if he have wisdom and eloquence as well, to secure an ascendant place in the council; he becomes, therefore, a chief, but he is "the mere exponent of public opinion," and so long as opinion is unanimous he is strong. But if he comes into contact with the general opinion his power is gone. If the son of a great chief is himself a man of more than average powers, his father's greatness forms one of the circumstances that may bring him into notice, and if other things are fairly equal, he is more likely than any one else on his father's death to succeed to the vacant position of influence. Thus there is a certain tendency for the chieftainship to become hereditary; but in no case does it truly assume that form. Any young warrior who displays a character without doubt more capable than that of the chief will insensibly work up into the topmost place. His counsels will be the most eagerly heard, his footsteps will be followed more and more completely till the hereditary chief drops back into the ranks and the new man has all the ascendency. As President Burnet pithily puts it (Schoolcraft, i., 231): "The authority of their chief is rather nominal than positive; more advisory than compulsory; and it relies more upon personal influence than the investment of office".

This description applies to all the races of South America that are upon the same level. Among Araucanians, Patagonians, and Abipones each man naturally falls into line behind the boldest and astutest spirit, otherwise there is no government. Galton gives the same account of the Damaras. So also the hill tribes of India, equally with the Tatar races of Siberia that are of this grade, all are wanting in that sense of personal devotion which lends so great, even though so artificial, an aid to the massing of barbarians in great communities.

Social Sympathy among Barbarians.

The central feature which marks the transition from savage to barbarian life is the settled abode, along with which, and essential to it, is the practice of cultivation. This leads to the system of slavery, which, though found in a limited degree in the higher savages, is in general not characteristic of savage life. For, when a slave has to be fed by the huntsman skill of his master, he is a burden rather than a help, and amid roving habits it is difficult to see how there can be enough of drudgery to make it convenient to feed him. But when the barbarian is settled in a fixed habitation, with his ground to be tilled round about it, a slave to do the laborious work will not only feed himself but help to feed the family. Prisoners are now not generally slain but enslaved, and out of this condition there arise the first gradations of rank. The slaves are a despised part of the population, and yet the freed slave, or the children of a slave woman by a freeman, may have a status a little better than that of a slave, though inferior to that of a man born without taint of servitude.

But at the other end, also, gradations of rank become apparent. For on the barbarian level, there is a strong tendency for communities to swell to considerable size. The pressure of food limitations is for a time removed so as to permit the tribe to multiply ; and a tribe which, as wandering savages, could barely secure sustenance for a few hundred members, may, by the cultivation of a fertile area, find its food so much increased that its natural power of multiplication will cause it to expand to as many thousands. In the savage state, so large a population must either have scattered out in search of game, or, if the land were already occupied, must have been starved down to the carrying limits of their own district. But cultivation permits of increase within the limits of one community, and that community has every inducement to cling together. For it now holds property ; its fields and fences and its permanent houses have to be defended from the inroads of its neighbours, and in no way can it sit so

secure as by the consolidation of its numbers round the village and its crops.

All this inevitably calls for fixity of government. When 100 warriors only are fighting, there is needed no great generalship. They concert their action among themselves. But 1000 warriors in the field are inefficient if the same degree of individual independence continues. The strength of the force will now be manifestly bound up with the skill and warlike genius of its captain; and the larger the number, the less will each man rely on his own individual valour; the more will he feel himself but a small fraction of a great machine, the virtue of which lies in the presiding spirit of him who lends it the strength of unity. If ten men fight against ten men, each individual feels the importance of his own bravery, and has little reason to rely on a leader. He sees all that is going on and can take care of himself. But if a man is one of 10,000, opposed to another 10,000, he necessarily feels himself but a humble instrument in the hands of the master mind; he fights badly if he has no faith in his general; but if he rests secure in the blessed confidence that, though dangers may be imminent, there is one whose watchfulness, foresight, and capacity give him, as a unit in a mighty whole, a security he must necessarily forfeit in isolated action, then the sense of his own individual importance declines, while his habit of turning to the central figure for implicit guidance grows upon him.

Hence, even in the lowest barbarian races, which can always place from 300 to 1000 men in the field, the control of the leading mind grows much more definite and personal than in the case of the highest savages. The chief is now no longer one who merely takes such deference as the rest are willing to give. For the safety of the whole he is invested with official authority, and it is to the interest of all to see that each yields an implicit obedience. Moreover, as it is impossible in the field or in strategy that one man should have direct and personal control over each one of 1000, subordinate chiefs arise, each group submitting itself to its most capable warrior, who takes his instructions from him on whom the whole rely. And these positions of command

will not be shifting and uncertain. So often as the fighting men gather for war, they will turn for guidance to the victorious leader of bygone conflicts; so that the glory of rank will settle permanently on the shoulders of those who have won a commanding influence over others.

And again, when the community is now in possession of houses and farms, when fixity of abode has given rise to rights of water and of fishing, of nearest firewood and of stoutest slave, disputes, though less impulsive, gather a wider importance. And yet they can no longer be settled in the conclave of all the warriors. A judicial assemblage of 1000 men is clumsy and inefficient, and if small disputes are of frequent occurrence attendance at it becomes an intolerable burden. Naturally, then, the power of judging according to the customs of the race, passes into the hands of men who have acquired some influence in the community, and, while people are willing to refer minor disputes to the local chief, anything of importance makes them turn their eyes to the great chief whose word has so much influence with all, and who can command so powerful a following, if it should be necessary to use force in maintaining justice.

Little more is needed to found a regular gradation of ranks through slaves to freemen, thence to petty chiefs, and so to the head chief. This stage occurs in all the lower barbarian races. It is characteristic of Papuan and Maori, of Kaffir, Dyak, and Indian hill tribes; it is characteristic of Tunguz and Kirghiz, and other Tatar races; of Iroquois and Thlinkeets, and of all the Central American people when first known to Europeans. By degrees mankind finds the advantage of massing itself in still larger groups, and when the middle barbarians are in communities of 50,000 to 250,000 the distinction of rank is intensified. The great chief becomes a king, and the subordinate chiefs become nobles, while the career of conquest which consolidation has inaugurated, leads to an increase of the servile population. And all these conditions of rank have a certain tendency to become hereditary. The children of slaves are born to the sad condition of their parents. But the noble's estate descends to his sons, who thereby commence life with a degree of consequence in the

public eye which ensures their influence, if only their capacity is moderately adequate to the burden of greatness bequeathed to them. Of course it is still open for merit of the kind appreciated in such a community to rise to the top, but there is less dispute, less of restless upheaval, and more of prescriptive harmony, when rank and influence are, in some measure at least, hereditary.

Thus do kings arise and nobilities, haughty by reason of birth and of wealth. It is the great feature of life in all the negro communities, in Fiji, and among the Polynesian races, such as Tongans and Samoans, who have reached the level of middle barbarism. It was the feature of Greeks in the days before Solon; it was the feature of Romans in the time of Numa, and of the Germans when they first emerged into history; of the Jews when they had settled awhile in Canaan, and of the English when Egbert was young.

As men become more richly endowed with the social sympathies, and, therefore, capable of forming still larger and stronger communities, the devotion to a king and the subserviency to a privileged class become in general a means of consolidating the state. A few people in the past, as the Romans and Athenians, were able to form aristocracies, or so-called democracies, and yet retain much harmony; but as a rule great states have gathered round some line of kings who have been able to inspire their people with unbounded devotion; and in a Malay state, or such a country as Madagascar, or Tahiti, or Hawaii, in ancient Mexico or Peru, in Babylon or primitive Egypt, the royal family became, as Ellis says of the Polynesians, sacred beings whose touch consecrated every article they used. In Assyria, as Rawlinson tells us (*Ancient Monarchies*, ii., 97), the king was the keystone of the whole community, and Wilkinson uses practically the same terms in describing the Pharaohs of ancient Egypt (i., 314). In Manu, we find that the Hindoos regarded their king as a "powerful divinity in man's form," and Kemble tells us (i., 172) that among the Saxons in England it was infamous for any warrior to survive the fall of his sovereign.

We are now inclined to scorn this servile deification of men, this prostration of human beings before the pride of

monarchs, but it had its value in the history of the past. It lent a permanency of union not otherwise at that stage attainable. H. Brooke Low describes the Dyaks in their battles as clustering round their head chief, all indifferent to their own safety, so long as he is secure. One has to think for a little to realise what solidity such a feeling must give to a body of men. If there had arisen among the Highland clans one master mind whose influence could have been felt in this way for a generation, and gathered round him the enthusiastic devotion which men instinctively yield to that which they know to be great, consolidation, strength, and prosperity must have followed. But the race was incapable of that degree of social combination.

The whole course of Gibbon's great history shows how often, when circumstances were favourable, the appearance of a Belisarius, a Mahomet, a Charlemagne, a Haroun, or any such exalted spirit, might kindle an enthusiasm whose common fire would knit huge bodies of men in powerful association. It also shows how the nations enjoyed their times of most peaceful and contented prosperity when the veneration of centuries had so gathered round the throne of Rome, of Constantinople, or of Susa that obedience was rendered without question ; for vast systems of organisation thereby became possible. Such a history as that of Thiers gives a vivid idea of the manner in which the French enthusiasm for Napoleon consolidated a great nation and concentrated its efforts, and we know how strong has been the tendency for the Napoleonic influence to become hereditary.

Feelings of loyalty and patriotism therefore, whatever is to be their ultimate value, have had, in their season, a most useful part to play in widening the social sympathies, in increasing the numbers of men that could contrive to dwell together in peace, united by brotherly feeling. And though the antagonism to those beyond the limits still continues, it loses by degrees something of its bitterness and ferocity. For when a man has acquired a sense of fellowship towards a million other men, the bulk of whom he has never beheld, his hostility towards a man for being a stranger must lessen, though, as we shall see, the old instincts exhibit them-

selves in a hate of those who speak another language, or wear outlandish clothes, or show a different tint in their skins.

But whatever amelioration there is takes place but slowly; and, returning again to our lower barbarians, we find in them an intense ferocity of feeling towards those without the limits of the community. This is especially shown in the habits of head hunting and of cannibalism, which are practices that reach their culmination in this and the following stage. Here it is that we find the most exultant delight in the slaughter of all outsiders.

Woodford (*Naturalist among the Head Hunters*, p. 157) says that the main object in life among the people of the Solomon Islands is to take the heads of enemies. In one trip he saw a small band bring in thirty-one heads. Forbes says that in Timor Laut the great object of warfare is to gather men's heads (p. 450), and Crespigny describes the same savage thirst among the Muruts of North Borneo. (*Roy. Geog. Soc.*, 1872.) He saw some men kill a poor old defenceless woman because she was an outsider and they wanted her head. Yet, strange to say, among themselves these people are very kindly and well-conducted. Wallace gives them an excellent character. He says of the Dyaks, for instance: "They are truthful and honest to a remarkable degree. Crimes of violence among themselves are unknown. In twelve years under Sir James Brooke's rule there had been but one murder within a Dyak tribe."

Yet listen to what Brooke has to say of their conduct as between tribe and tribe (*Journal*, i., 195): "The life of the Dyaks is terrible. Day after day, month after month, it is the same story, a life of watchfulness and flight and fight." Karl Bock says (p. 216): "The head hunting of the Dyaks is working them off the face of the earth". But about 1840, as Brooke tells us, they began to find that, amid the more powerful races that surrounded them, inevitable destruction lay in the course they were pursuing; and since then head hunting has visibly declined. Wallace says that the practice was at the time of his visit only recently extinct in Celebes (*Mal. Arch.*, p. 89), and Boyle made the same observation in Borneo. But the mania for heads is still rampant in New Britain,

New Zealand, the Solomon Islands, and the Louisiade and D'Entrecasteaux Archipelagos. It was strong and fierce in New Caledonia till that island was occupied by the French.

The same thirst for the blood of outsiders is characteristic of all the middle barbarians in an almost equal degree. Most of the negro races exhibit a fierce delight in the possession of human heads. Major Wissman says, for instance, that "among the Wawemba there exists a perfectly developed rank, determined by the number of heads a man possesses". Before a Galla youth may marry he must have secured at least one human head, and other races demand the same gory passport to the tenderest affections. African travellers have constant occasion to describe how the dwellings of negro chiefs and warriors are decorated with ghastly lines of human skulls, which have rotted on posts or on walls. Forbes (quoted Spencer, *Desc. Soc.*, iv., 22) says that he saw one small building adorned with 148 skulls, and Laird and Oldfield describe how, in the villages of the Calabar coast, these grisly trophies are stuck up on all hands, or may be seen kicked about the streets in derision.

The same unutterable ferocity to those outside their communities has in all ages been characteristic of the Tatar races. Rawlinson says (ii., 511): "The Scythian who slew an enemy in battle immediately proceeded to drink his blood. He then cut off the head, stripped off the scalp, which he hung on his bridle rein; of the upper portion of the skull he made a drinking cup for his feasts." These practices were familiar to our Teutonic ancestors. Even when they had been baptised and had accepted a faith of mildness, so late as the sixth and seventh centuries, the skull of an enemy of the race was handed round as a goblet, long after he was dead and gone. In the year 573 A.D., Alboin, king of the Lombards and master of Italy, sent to his wife, Rosamond, her father's gold-ornamented skull that she might quaff the wine that filled it to the brim. Diodorus describes how busy were the Celts on the field of battle after victory (xiv., 115), each man cutting off as many heads as he could gather, these being precious badges of glory; and Gibbon relates how the Moguls, even in the beginning of the fifteenth century, made pyramids

of the skulls of the slain. Nay more than that, Tamerlane, whose heart, he tells us, "was not devoid of the social virtues," killed huge populations for the mere purpose of raising pyramids of their heads. On the ruins of Bagdad, as it is well known, he raised one such trophy consisting of 90,000 skulls. Yet doubtless Marlowe's picture of him in his private life is not untrue, and perhaps he was in reality that

> Image of honour and nobility

which he is asserted to have been. For it is ever to be remembered that the barbarian ideal regards the greatest kindliness in the home as in no way inconsistent with fierceness and slaughter against the stranger.

It is the type of hero that runs through all Homer; the noblest of men is he who is faithful among his affectionate kinsmen, and yet drives his spear with no remorse through the flank of the fallen foeman. Even the women adore this mingling of affection and ferocity, and mothers pray that their sons might be kind at home, terrible abroad. Hector (*Iliad*, vi., 481) lifts up his babe Astyanax and kisses him, and prays to Zeus that he may grow up

> to bear the gory spoils,
> Having slain some foe, thereby rejoicing the
> heart of his mother.

Aristotle says (*Politics*, vii., 2) that among the Macedonians a public disgrace was attached to one who attained full manhood without having slain an enemy, and that there were tribes which erected on a man's tomb a column for every person he had killed.

The Jews, in the days of the Judges, were upon the same level. King David, who was of the middle barbarian grade, gathered the foreskins of his slain enemies, and it was with 100 of these that he paid King Saul for his daughter. (2 Samuel iii. 14.) It is a custom practised even now by negro and other races. Bruce asserts that it was common among the Abyssinians (vi., 116), and it was well known to Egyptians and Assyrians. As to the general usages of the Jews, the Mosaic injunctions leave us in no doubt. "Of the cities of these people which the Lord thy God doth give thee for

an inheritance, thou shalt save nothing alive that breatheth, but thou shalt utterly destroy them. But of the cities that are very far off from thee, thou shalt smite every male thereof with the edge of the sword, but the women and the little ones thou shalt take unto thyself." (Deut. xx. 16.) No one can read the historical parts of the Old Testament without seeing that the Jews answer to the general description of the middle barbarians, being richly gifted with patriotism, and the social sympathies that display themselves within the community, but without compassion or any sense of justice to those beyond its bounds.

Cannibalism.

It would be unnecessarily tedious to gather the evidence of the same state of things among other barbarian races. It existed uniformly among all of them. In some, however, the ferocity felt towards those outside the tribe or nation led to the fullest development of cannibal tastes that the human race has known. We have seen that it was a custom dawning among savages, who, however, never learned to look on human bodies as an article of festive diet. That vindictive revenge is found only in the stages of lower and middle barbarism, but it is far from being general even in these, for it reaches notorious dimensions only among some of the Polynesian and Papuan races; and is met with among very few of the negro peoples. Otherwise it is little known. The Maori and the Fijian have had the unenviable distinction of being the most cannibal of men. The primary motive was, as Thomson says of the Maori, "to gratify revenge and hatred, to cast disgrace on the persons eaten, and to strike terror". It seems, however, to have grown to be a horrid appetite; perhaps, as it has been suggested, by reason, after the extinction of the moa, of the absence of animals which might have furnished a meat diet. Thomson tells us (*Story of New Zealand*, i., 144) that "there were few Maoris above the age of forty who had not partaken of human flesh". The great chief Hongi and his army of 1000 men ate 300 bodies in 1822 after the capture of Totara, and carried back with them

a long line of prisoners, whose successive slaughter might prolong the feast and afford to the women and children a share in the triumphant revenge. Te Whero, not long after, cooked 200 bodies at the close of a successful fight.

The Fijians were their only rivals in these abhorrent festivals. Miss Gordon Cumming (*At Home in Fiji*, p. 134) speaks of a chief who had a register of forty-eight people whom he had eaten, and there were two others who gloried in having shared in the consumption of a total of 872 human bodies. M. Bensusan (*Roy. Geog. Soc.*, 1862, p. 46) mentions a feast, towards the end of 1851, in which about fifty bodies were devoured. The fact that a register was kept in a way we would never think of doing in regard to sheep or bullocks, would indicate that the primary object was not nutrition, but a grim revenge. There can, however, be no doubt that the appetite grew by what it fed on, for Erskine tells us in his book on the West Pacific, that one district of Fiji was mainly peopled by men and women who were well aware that they were being fattened for the great festivals as they recurred, and who were quite resigned to the fate before them.

Of the natives of the New Hebrides, the Rev. Dr. Steel tells us that while they generally devour only the bodies of those slain in battle, they are sometimes led by their appetite for flesh to make excursions for the capture of victims. (*New Hebrides*, p. 25.) Woodford describes how in the Solomon Islands cannibalism was a daily practice; and he relates a most gruesome scene of the slaughter of a boy for a feast, a spectacle apparently only too common. (*Naturalist Among Head Hunters*, p. 157.) In New Ireland the people still glory in making cannibal banquets, but in New Britain, though the practice survives, it is rapidly dying out. (*Roy. Geog. Soc.*, 1887, p. 8.) It was universal in New Caledonia till the French assumed control. (*Ethnol. Soc.*, iii., 63.) Mr. B. H. Thomson asserts (*Roy. Geog. Soc.*, 1889, p. 527) that it was very common, though now almost unknown, in the Louisiade and D'Entrecasteaux Archipelagos; Ellis is assured that it prevailed in the Marquesas and other Polynesian groups.

The Rev. Mr. Chalmers says of the Papuans of New

Guinea "they lived only to fight, and the victory was celebrated by a cannibal feast". (*New Guinea*, p. 188.) But he considers that these propensities are dying out, and Wilfrid Powell says that they are now scarcely known in the island.

Among the more barbarous Malay races cannibalism is prevalent to a certain extent, the less civilised peoples of Sumatra, Celebes and Borneo being somewhat addicted to it, but the extent must be slight, as the testimony is so very contradictory. Rajah Brooke expressly states that the Dyaks were cannibal, while H. Brooke Low entirely denies the accusation. Karl Bock asserts that a single village has been known to slaughter forty captives for a ten days' festival; but as this was evidence gathered from hearsay, there is reason to believe it exaggerated, more especially as permanent residents in the island deny that cannibalism is really a practice.

Among the negroes the general feeling towards cannibalism is one of deep disapprobation, and this is shown by the way in which the traveller is always being told, by the race with whom he happens to be, that other and hostile races further on are addicted to the practice. But, as he moves onward, these tribes always keep afar off like an *ignis fatuus*. Each tribe fixes the charge on those beyond it. And yet there is evidence enough that several of the negro races, not more than 4 or 5 per cent. of the whole, are cannibals. It is proven against the Niam-niams (Casati, p. 142; Petherick, p. 458), also against the Monbuttos and Mpongwe; and Lichtenstein states that at least some of the Bechuana tribes used to gnaw, though with apparent abhorrence, a mouthful from the limbs of dead enemies. But the only notoriously cannibal race is that of the Fans, of whom Reade tells us that they have grades of sentiment in regard to the practice, some forms of it being approved, some tolerated, and others condemned.

In the higher barbarian races the practice ceases to be a sign of warlike ferocity, though Ellis tells us that among the Tahitians (*Polynesian Researches*, i., 310) "occasionally a warrior out of bravado or revenge has been known to eat two or three mouthfuls of a vanquished foe". It often lingers on in some races as an adjunct of religion, for the war feast was

very apt to drift into a solemn religious rite, and in that case the feast of human bodies often formed part of an old-time custom, maintained as a religious obligation when the taste for cannibalism had expired.

This seems to have been the nature of the cannibal feasts of Arabia mentioned by Robertson Smith (*Kinship*, p. 284), and of similar festivals among the Teutonic races when they first emerge into notice. Such a stage, however, is best known to us in the case of the Mexicans, who, at their feasts of the full moon (Bancroft, *Native Races*, i., 107), were accustomed in every temple to sacrifice to the sun-god numbers of captives and of children offered by their parents for the sacred purpose. Every month some hundreds of hearts were wrenched from the yet living bodies, so that ere their quivering had ceased they might be offered upon the altar; and then, as Prescott describes (i., chap. iii.), the roasted bodies were eaten in a solemn feast. Diaz reckons that about 2500 bodies were thus devoured annually, perhaps about one to each 2000 of the population. The same practice to about the same extent prevailed among the kindred races of Central America. But the Peruvians had, ere the arrival of the Spaniards, outgrown the detestable custom of eating the victims. They celebrated human sacrifices more often perhaps than Prescott asserts (*Peru*, i., 105), but they never devoured a body. (Benzoni, *Hist. of New World*, Eng. trans., p. 248.) Acosta estimates that about 200 boys had been known to form a single sacrifice on a great occasion; but for a long time before the arrival of the Spaniards, the growing power of humanity had asserted itself in spite of the conservative tendency of religion, and it had become customary to substitute dummy forms. (Quoted Spencer, *Desc. Soc.*, ii., 26.)

In civilised races, cannibalism as a custom entirely dies out, though the primitive savagery of each race occasionally betrays itself. In Manu the Hindoo is told that he who reaches the last extremity of hunger may without sin kill a child and eat it (x., 105). But as a rule the histories of sieges, famines, and shipwrecks among civilised men indicate how strongly developed is that form of social sympathy which forbids a man to save his own life by consuming the flesh of a fellow-man.

It is suggestive, however, of the revengeful origin of cannibalism as a custom, that even in civilised races extreme hatred drives ferocious spirits to the old practice. The leading women of Mecca ate the entrails of Mahomet's uncle after the battle of Ohod, in which he was slain; and at Florence, in the fourteenth century, when rulers, who had been the objects of popular execration, were overthrown, the citizens ate their flesh as a sign of vengeance glutted to the last extreme. (Machiavelli, ii., chap. viii.) During the French revolution the heart of the unfortunate Princess Lamballe was cooked in the streets of Paris and eaten by an avenger of the people.

Yet we are justified in saying that head hunting, scalp gathering, cannibalism, and analogous demonstrations of fierce hatred against the outsider, reach their climax at the stage of the lower and middle barbarians and thenceforward die out.

Cannibals may be Affectionate, Good-tempered People.

It is strange to note, however, that with all this capacity for cruelty, the barbarian lives a happy and affectionate life in the main, within the limits of his own people. Gisborne says of the Maoris (*New Zealand*, p. 26) that though "they are suspicious and quick to resent a wrong, there is much natural courtesy in their manners, and much of eastern politeness in their intercourse". Thomson speaks of them as extremely hospitable, though he considers them to be vengeful, jealous, vain and arrogant; cheerfulness prevails in their life, and they reckon it disgraceful to give way to anger. They have little true benevolence, but, like children, they easily become compassionate, and are moved to tears by that which produces a temporary impression on them. (*Story of New Zealand*, i., 85.) In connection with this most notoriously cannibal of all races, it sounds strangely in our ears to hear the words of Taylor, a missionary who knew the Maoris well, and extenuated none of their faults: "In their social relations there was much to admire. The love of their offspring and their relations, their good feeling and kindliness one towards another, their careful avoidance of all

cause of quarrel, and their powerful emotion of joy on meeting with absent friends, all prove them to have been not deficient in natural affection." (*New Zealand and its Inhabitants*, p. 10.)

The Fijians, their only rivals in cannibalism, though described as "cruel, treacherous and sensual," are yet by many travellers spoken of as "witty and polite". (Erskine, *West Pacific*, p. 272.) Though inveterate liars, they were not "deficient in humanity, and were marked by a universal hospitality". It would be tedious to quote in detail the favourable delineations of writers who have described the home life of Papuan and Polynesian races. Friendliness, kindliness, good-humour and similar terms are employed in regard to races which have been notorious as cannibals and head hunters. Indeed, among all descriptions of these people in their homes I have found only one that speaks with severity. A. R. Wallace declares of the Papuans of New Guinea that they are "very deficient in affections and moral sentiments, being in their treatment of children very often violent and cruel". (*Malay Arch.*, p. 587.) Yet he is not without a good word for them, and the lives cannot be very unfriendly of those who are "joyous and laughter-loving". Moreover, the Rev. James Chalmers, who actually lived with them and knew them intimately, though he speaks severely of their ferocity in war, and describes the state of suspense and fear in which every one lies down to sleep at night, how they live up in trees or on the water, and how they sleep with their arms by their side and a bunch of dry nut shells at the door to rouse them if an enemy intrudes by night, yet describes their daily life as eminently kind and merry (pp. 112, 126).

Ellis says of the Tahitians that "next to their hospitality, their cheerfulness and good-nature strike a stranger. They are, generally speaking, careful not to give offence to each other, and there are few domestic brawls." Little tells us that in Madagascar "a pleasing feature of their life is the studied courtesy and hospitality shown to strangers" (p. 61), while among themselves they are "always reserved, courteous and exceedingly well behaved. The entire population may

be described as showing what we in England would call good breeding" (p. 71). The author then proceeds to give examples of the extreme politeness which pervades their everyday life. Ellis considers that though they are somewhat indifferent to distress and death, yet "there is much kindness of heart, and selfishness is held in universal detestation". (*Hist. of Madagascar*, p. 139.)

In regard to the negroes, Livingstone speaks repeatedly of their "punctiliousness of manners" and of the extreme hospitality met with, where fear was absent; while Laird, and Clapperton and Park all praise the invariable kindness of the women. Barrow considers the Kaffirs "mild and gentle," and Lichtenstein says that though they are "barbarous to enemies, they are true and faithful to friends". Burton gives the negroes of East Africa a decidedly scathing character, and several other writers agree more or less fully with his unfavourable views; but by most travellers they are credited with good-humour and a desire to please. Of the negroes of the rest of Africa, the testimony uniformly indicates at least a surface kindness of manners. No one need expect any great sacrifice from a negro for the sake of obliging; but in the ordinary amenities of life, an average village is marked by an abundant good-nature and cheerfulness.

Rohlf speaks of the hospitality and courtesy generally to be met with among the Moors, and Hotten says that though the Abyssinians are inveterate liars, yet they are courteous in manner, and rarely exhibit cruelty among themselves; while Gobat was struck by the mildness with which they treated servants and slaves. Huc, in his *Travels in Tartary*, describes the Mongol races as being "full of gentleness and good nature in their domestic life, even though fond of pillage, cruelty and unnatural debauches" (i., 257).

Among all the Malay races the same contrast exists of extreme gentleness within the community, together with much ferocity towards all without it. Wallace says (*Malay Archipelago*, p. 585): "The higher classes of Malays are exceedingly polite, and have all the quiet ease and dignity of the best-bred Europeans. Yet this is compatible with a reckless cruelty and contempt of human life which is the dark side of their

character." Sir Stamford Raffles says that the Javanese are "kind, affectionate, gentle, and contented". (*Hist. of Java*, i., 248.) "They have a great sense of propriety and are never rude or abrupt but uniformly easy and courteous" (i., 60). Marsden says of the Sumatrans that they are "mild, peaceful and forbearing, unless their anger be roused by strong provocation, when they are implacable in their resentments". (*Hist. of Sumatra*, p. 208.)

I have already run much risk of being tedious with reiterated statements of the same class of facts. I shall not pursue the quotations of other writers as to the general mildness of domestic manners among barbarian races. It must be enough to say that all of them exemplify this increase of those social sympathies and consequent daily amenities which not only are necessary to life in communities, but also, as the capacity for them increases, lead to the steady enlargement of the size of the community. Thus 1,000,000 people on the higher barbarian level will live in peacefulness among themselves for generations together, obeying the same ruler, submissive to the same laws, working harmoniously, and finding the amusements and delights of life chiefly in the city and the social gathering, while 1,000,000 savages would make 5000 mutually hostile tribes.

Care of the Sick and Aged.

But we must beware of travelling too fast in our notion of the upward growth of sympathy. Even the domestic nature of the best of barbarians is far from being angelic, as we may easily determine by a consideration of their treatment of the sick. No sort of corporate or public care for the feeble or poor is provided in any of the barbarian races, until we reach the very highest communities of their highest grade, wherein begins to appear some slight notion of systematic benevolence.

Of the lower barbarians, some show a little improvement in this respect over the savage, others show none that is perceptible. The Maoris never abandoned a sick person altogether. If his case seemed hopeless, he was certainly

removed from the dwelling and placed in a hut or shelter at some distance away; but there he was always carefully fed and tended till the end arrived. Yet this is a rare case among lower or middle barbarians, who almost all find the strain of a very prolonged illness or decrepitude more than their patience can tolerate. Nor need we be surprised at this. Among ourselves, when we hear of a man who has for twenty years nursed and tended with undeviating affection a bed-ridden wife, or when we hear of a family who have year after year waited with fond solicitude on the helpless old age of their grandparents, we accord to their goodness the praise and admiration which is their due. We need never expect of a barbarian the steadiness of purpose which this implies. It is a growth of social sympathy in general beyond him. He is capable of yielding to the emotions of kindliness which well up in his heart as a passing impression. He is capable of spreading his affectionate attention over days and weeks as the outcome of disinterested affection. But it is too much to ask him to be for years together the willing slave of the sick or the impotent.

Hence we find in this grade of humanity the very general custom of burying the aged either alive or else after having been strangled. Codrington asserts that it is a custom universal in Melanesia (p. 347), while the Rev. Dr. Steel declares it to have been common in the New Hebrides; "the aged and delirious are always buried alive". (*New Hebrides*, p. 219.) Turner, in his *Polynesia* (p. 450), describes it as a practice among the New Caledonians and most of the neighbouring groups, though, as he says, "the sick are well tended to the last". Among the Fijians the custom reached its acme, for there the burial of an elderly person was made the occasion of a sort of festival, and the individual to be interred seems generally to have consented readily enough to the process, in order that he might reach the world of spirits before complete debility had ruined both body and mind.

M. Bensusan tells us (*Roy. Geog. Soc.*, 1862, p. 46) that "old men and women in Fiji are often buried alive by their children from the idea they entertain that they are perfectly useless when old, and that their spirits are dead even if their

bodies are alive". He relates how Mr. Hunt, a missionary, was once invited by a young man to his mother's funeral, but when the old lady herself was seen to head the procession he was surprised and demanded an explanation. The young man said that his mother had consented, and that he and his brothers were acting thus out of filial regard. When they reached the new-made grave the old woman took an affectionate farewell of children and grandchildren, "a rope was put round her neck by her own sons, who strangled her, after which she was laid in the grave with the usual ceremonies". M. Bensusan adds that "when man, woman, or child is ill with a lingering sickness it is the practice for the invalid to be strangled by the relatives".

But the Papuan stock is more inclined to this impatient way of anticipating nature than the Polynesian. The burial of sick or aged is rare among the latter race, who in general are of more gracious life and are more winning in their affections. Ellis, it is true, says that in Tahiti (*Polynesian Researches*, iii., 48) one who had been very long sick and was expected to die was sometimes buried alive if his friends thought he took an unnecessary time in departing. But this was a practice rather tolerated than approved; though indeed the common usage was little better, for the Tahitians, like the Polynesians in general, were not patient with the sick. "A small hut was erected with a few cocoanut leaves, either near a stream or at a short distance from the dwelling. Into this the sick person was removed, and for a time the children or friends would supply a scanty portion of food, but they often wearied of sending this small alleviation, and it is believed that many have died as much from hunger as from disease."

This practice of burying alive the sick, and more especially the very aged, seems to have prevailed among the Tatar tribes, for I have found it spoken of as an obsolete custom of quite a number of races throughout Northern Asia. But in general when we reach the level of the middle barbarians we have left behind us the region of active atrocity to the feeble; and we meet with a prevailing type which exhibits kindness for a time longer or shorter according to the race, but which

at length is wearied of well-doing. Hence we may receive of the same people widely discrepant accounts, according as the observer has witnessed the tenderness bestowed on the sick under the influence of a new-born pity, or the callous indifference exhibited in the same case after the pity has grown old and stale, and the routine of daily nursing has become repulsive. Thus Waitz relates of the negro races circumstances which shine out in the light of true humanity or fond devotion; yet Burton, who, however, is little inclined to see the good points of the negro, says that he "is a hard-hearted man, who seems to ignore all the charities of father, son and brother. It is painful to witness the complete inhumanity with which a porter, seized with smallpox, is allowed by his comrades to fall behind the march in the jungle." (*Lake Regions*, ii., 326.) But it is to be remembered that a man with the smallpox, if no relative, would be a difficult subject for even a civilised man to face up to; and he who should willingly and unrepiningly nurse a perfect stranger through that loathsome, dangerous and most infectious disease would deserve credit for the highest possible humanity. Livingstone shows apparently a more balanced judgment than either of these writers in his appreciation of the negro character. "There is not among them," he says, "an approach to that constant stream of benevolence flowing from the rich to the poor which we have in England, nor yet the unostentatious attention which we have among our own poor to each other. Yet there are frequent instances of genuine kindness and liberality, as well as actions of an opposite character. The rich show kindness to the poor only in expectation of services, and a poor person who has no relations will seldom be supplied even with water in illness, and when dead will be dragged out to be devoured by the hyænas instead of being buried." (*Missionary Travels*, p. 511.) But while he relates cases of great neglect and cruelty, he adds others of much kindness, and says, "by a selection of instances of either kind, it would not be difficult to make these people appear excessively good or uncommonly bad".

Mrs. French Sheldon (*Anthrop. Inst.*, xxi., 360) says that "the negroes of East Africa are kind and sympathetic to the

sick up to the point when they think there is no hope; but the dying person is abandoned". Indeed this is the general picture of human nature in the middle barbarian stage. Our Teutonic ancestors, when we first learn of them, had not even reached it, for Grimm tells us that "they killed the aged and the sick, often burying them alive".

It is not till we reach the level of the higher barbarians that we find a public opinion which condemns the abandonment of the sick or aged, insists upon kindness to these and also to the poor and unfortunate as the duty of all. In Madagascar Ellis praises "the kind and patient manner in which they attend upon the sick". (*Hist. of Madagascar*, i., 231.) Lepers there place their little baskets by the roadside, and the passers drop into them food or money to alleviate the sufferings of people they never saw before and may never see again. Here begins to be apparent the first dawn of benevolence as a systematic feature of society. Yet strange to say, these people can look without appreciable emotion at much human agony. Like our forefathers of the middle ages they could give freely in charity to relieve the woes of some, while they flocked to executions to enjoy a morbid excitement in the sufferings of others.

The same description applies to the Malays; always ready to assist the suffering and needy, and filled both with the instinct and the duty of sympathy, yet capable of looking unmoved upon much human agony. In Abyssinia also there is this incongruous association; but amid much that is callous, the habit of almsgiving has grown to such an excess and bred so much of the beggar element that travellers are perfectly plagued by the prevalence of mendicants. (Harris, iii., 55.) Indeed from this point forward we must be prepared to notice how, as the hearts of the community in general become softened and their charity ready to flow, there grows up, in addition to those who have real claims of sickness or distress, a parasitic class who are either too lazy or too incompetent to face the arduous task of providing for themselves and so abuse the growing kindness of others.

In savage and barbarian life the pauper is an impossibility. There is no fund of general benevolence on which he can

spunge, nor has there arisen any of that industrial organisation which is so elaborate that if a man miss his mark in it, if he fails to choose an occupation for which he is suited, or if he chooses an occupation which chances to grow less necessary or overcrowded, he is lost for the rest of life, unless of that superior sort of competence which can turn to and learn a second calling when the first has failed. In civilised societies all forms of misfortune and incompetence linger on, supported by the general efforts of all. In more primitive times the stern rule is "work or starve". No matter whether the man who fails to work is prevented by sickness or old age, mutilation or mere laziness, it is all the same. Starvation will take him out of the road. In general, travellers are struck by the absence in savage and barbarian people of the deaf, the blind, and the idiotic. It is not that these never existed, but in such societies their existence is not prolonged as with us. They soon perish, even if not purposely destroyed, which is their most ordinary fate (Norman, *Far East*, p. 553), as it was in mediæval Europe. Human pity and tenderness of the emotional and impulsive sort had long been dwellers in the breasts of men before there dawned that patient sympathy which is capable of labouring with unwearied gentleness through years of helpless age or sickness, that but for love would be intolerably irksome.

CHAPTER XII.

THE GROWTH OF SYMPATHY AS SHOWN IN BENEVOLENCE.

Civilisation Apparently Breeds an Element of Misery.

In civilised races there appears, along with increasing comfort and fulness of life, a body of very evident misery which we are too apt to consider as having been called into existence by civilisation, whereas it has only been prevented by civilisation from being crushed out of existence. For the play of human sympathy helps to keep alive all those various forms of incompetence which in the savage stage would most assuredly be ruthlessly destroyed. Thus sympathy, as it grows, provides food for its own further activity, and we find that in all the lower civilised races the practice of almsgiving tends to flourish and to fill the land with crowds of those who, but for it, were doomed to an early disappearance. The blind, the dumb, the deformed, the idiotic, the imbecile, the incompetent, the incorrigibly lazy are preserved, when, but for sympathy, they would have been eliminated. All the countries I have classed as of the lower civilisation belong without exception to either the Buddhist or the Mohammedan faith. In all, the sacred duty of almsgiving is fervidly impressed, and in the early zeal of this growing charity neither bounds nor judgment can be discerned. Buddha told his followers that the first of perfections is almsgiving. "Give away to all who come and ask; give everything that they require till nought remains." (Rhys Davids, *Buddhist Birth Stories*, p. 19.) But in the countries where Buddhism is professed, just as in Mohammedan countries and in the Christendom of the middle ages, almsgiving was perhaps only in part sympathetic, the charitable having an eye to the

blessings eventually to flow to themselves out of their good works. In countries like Siam, Burmah, Tongking and Thibet it is an essential of a well-conducted life to "make merit" by giving alms, and the merit so made is a thing which may be transferred from one person to another, or balanced nicely, debtor and creditor, in the account of a man's conduct. Nevertheless, it is something in the way of progress when religion no longer demands that human hearts should quiver on its altars, or skulls should gleam upon its temple walls, but requires rather the sacrifices of charity.

The descriptions given of such countries in the present day remind us of the condition of Europe in the twelfth or thirteenth century. A growing power of sympathy abounds, but it acts in a very uneven and spasmodic fashion. A king of France may wash daily the feet of twenty beggars, yet with unconscious cruelty ride over the mangled bodies of serfs who only asked for a small relief from intolerable burdens. So in Siam, there is a yearly festival in which the ladies wash the feet of poor women, provide them with warm clothing, and with their own hands wait upon them at a banquet. Yet, in this same Siam, no one takes the trouble to bury or burn the bodies of those who die poor and friendless. They are tossed into spaces reserved for the purpose, where vultures and hyænas await the horrid feast. (Karl Bock, *Temples and Elephants*, p. 59; R. Brown, *Peoples of the World*, iv., 163.)

The Koran thus admonishes all good Moslems: "Show kindness unto parents, and relations, and orphans, and the poor, and your neighbour who is of kin to you, and also your neighbour who is a stranger" (chap. iv.). So we find in Arab, Moorish, Berber, Egyptian, Turkish, Persian and Afghan life an ostentatious display of charity whose object is rather to open the gate of paradise to the giver than to minister to the comfort of the afflicted; for the Koran promises (chap. lvii.) a double reward from God for all the alms that are given, and moreover great honour hereafter; whilst those who fail in this respect are to have serpents twisted round their necks on the day of resurrection (chap. iii.). Alms were of two sorts, legal and voluntary. For the former the mini-

mum rate was 2½ per cent. of a man's income, but it rose in certain cases to 10 per cent.; this sum including, of course, not only what was given to the poor, but also payments for the support of religion. This legal almsgiving has now, however, everywhere been replaced by the purely voluntary offering, which is ample, though ill-advised. The streets of Mohammedan towns are generally pestered with professional beggars, the result of a sympathy which gratifies its own immediate instincts without exhibiting any of that kindly-purposed self-restraint which is most truly characteristic of a sincere desire for the welfare of others.

This officious merit-making charity is very characteristic of all communities in all three grades of civilisation. Among the Hindoos it is a sacred duty to feed the religious mendicant (Elphinstone, 201), and give alms to the poor. Manu directs that "according to his ability, a householder must give to beggars" (iv., 32). Elphinstone considers that though the modern Hindoo is compassionate and benevolent, there is a marked deficiency of active humanity in his daily life. Yet the progress from the barbarian standard to theirs is both striking and solid.

The earliest dawn of a sympathy that should be both warm and wise is undoubtedly to be traced among the Chinese, though in this respect, as in all their civilisation, one seems to follow at a very early date a long and promising line of progress only to find it end in atrophy. Certainly the teaching of Confucius in regard to benevolence was wiser than that of Buddha, his coeval in time and influence. It is not to consist in the mere giving of alms, it is to show itself by a willing sympathy towards all men. "Self must be conquered before a man can be truly benevolent". (R. K. Douglas, *Confucianism and Taouism*, p. 108.) "Benevolence should be exercised with discretion, and should not be only the result of momentary impulses." There seem to have been many in early China who thought thus; but there, as elsewhere, the growth of sympathy, when it first begins to be felt as a duty, is anomalous and ill-directed. It appears as a noble quality but with sad perversions; and it has been responsible for the huge predominance of beggars in China. They swarm every-

where, "of all ages, of both sexes; blind, lame, maimed, and leprous. The blind beggars sometimes pass through the streets, led in single file by other beggars who can see." They form a regular profession "governed in the pursuits of their calling by their own headmen". Very often one of these headmen goes round and compounds with shopkeepers and householders, so much per annum to be paid, and in return there will be an immunity from the visits of beggars. A slip of red paper is given as a guarantee that he who possesses it will, for the space of a year, be free from pestering. (Doolittle, p. 527.)

Hospitals and Asylums.

But the Chinese vindicated in ages now long past their claim to be the first of truly benevolent peoples; and nothing can so clearly denote the dawn of civilisation on its moral side as their early foundation of hospitals and asylums. For this indicates how sympathy is passing from that stage of impulsive feeling of which every savage is sometimes capable, and becoming a settled principle of life, a thing of which no savage ever dreams. Thornton, in his *History of China* (i., 83), speaks of the Emperor Tae-woo as having erected asylums for the aged poor somewhere about the year 1630 B.C., and according to the Rev. W. C. Milne (*Life in China*, p. 49), some of the foundling hospitals seem to date from about 1000 B.C. He tells us that the Chinese have had for the last 3000 years a system of building temporary asylums during times of extreme famine, wherein children might be fed and kept alive till the famine abated. He visited one of these places at Shanghai, containing 2000 children, but this was so far from being temporary that it had already existed for a long time when the first Europeans reached China. At present, according to Milne, the native indigenous charities of China fall under eight different heads:—

1. Retreats for poor widows.
2. Provident societies which offer shelter to the infirm.
3. Societies to assist the blind. For instance in the Ningpo district, the local society provides each of 2394 blind persons with a shilling a week.

4. Leper Hospitals—that at Ningpo had 341 patients.

5. Almshouses for destitute old men.

6. Benevolent societies of people who visit the sick and poor.

7. Charities for the education of the children of the poor.

8. Medical dispensaries, which, however, are but mean concerns.

Besides these, there are the Buddhist nuns, who devote their lives to the visiting of the sick and the needy. Doolittle, in addition to these charities, speaks of associations for the distribution of good books gratuitously, and others which provide the funerals of very poor people. Milne considers that in so huge a population the demand for relief is most inadequately met (p. 72), yet it must be very plain that the whispers of humanity have been heard in China for many long centuries.

So also in India, the progress of the race brought the time when formless impulses of benevolence took the shape of a definite system and policy. Hospitals here and there began to make their appearance about the third century B.C., though they never reached any great size or number. Burdett (*Hospitals and Asylums*, ii., 28) is at some pains to show that about 400 A.D. several of the sovereigns of Buddhist India employed physicians for each district, whose business it was to visit the sick poor and, where necessary, to provide them with food and medicine.

Tiele describes (p. 129) how the faith of the ancient Egyptians inculcated a certain feeling of sympathy which forbade the oppression of the feeble, and the Jews apparently carried away with them the same general class of ideas, for in the Pentateuch, while there are no precepts of actual benevolence, there are many warnings against the abuse of power. The only passages that would indicate the claims of charity are those which direct the land-owner not to be too greedy in gathering in his crops but to leave something for the gleaner. "Thou shalt not wholly rea the corners of the field, nor glean thy vineyard, thou shalt leave them for the poor and the stranger." (Lev. xix. 9.) In the Psalms there is heard a voice of deeper compassion: "Blessed is he that considereth the

poor" (xli. 1); and in the Proverbs are many expressions such as this: "Whoso stoppeth his ears at the cry of the poor, he also shall cry himself, but shall not be heard" (xxi. 13). Successive prophets bear witness to the widening of the scope of benevolence, and in the later times, as Sale tells us, alms were regarded as righteousness, a view twice expressed in the New Testament. (Matt. vi. 1, 1 Cor. ix. 6.) The rabbis taught that the frequent giving of alms would "free a man from hell-fire and merit everlasting life".

It was this "merit-making" view of sympathy which was so characteristic a feature of the Pharisees, and which roused Jesus to so much indignation as being little akin to that true and unselfish sympathy which was the foundation of his teaching. Yet neither before the time of Jesus nor after it did any Jew dream of either hospital or asylum. The first institution of the kind at Jerusalem, apart from an alleged mad-house of the fourth century, was built in the fifteenth century by Cosmo de Medici, but it was only a resting-place for old and infirm pilgrims after they had gained the holy city. The first real hospital in Jerusalem is no older than the present century, and was due to the liberality of the Rothschilds.

Greece exhibits, at a comparatively early period, some sporadic instances of systematic benevolence. At Thebes, as Duruy asserts (*Greece*, i., 559), those parents who were too poor to rear their children, were invited not to destroy them but to commit them to the care of certain public authorities, yet this provision probably applied only to the children of well-born citizens and had no connection with a general principle of humanity. The same sort of criticism in a measure applies to a species of charity which Aristotle tells us was practised in Athens. "The council examines infirm paupers, for there is a law which enacts that persons possessing less than three minas, who are so crippled as not to be able to do any work, are, after examination by the council, to receive two oboli a day from the state for their support." (*Constitution of Athens*, chap. xlix.) But this regulation referred only to such as had been admitted to citizenship, and the institution had something in it of a class support rather

than of humanity, though doubtless both were in some measure concerned. The archon had a certain charge of widows and orphans, but apparently only in the way of administering their property, not by supporting them if they were poor. All such regulations in ancient Rome or Greece were not in the least concerned with the stranger or the slave. They had something in them of that very partial sort of generosity which bade the knight in feudal times deal in kindly fashion with gentle blood, though stern, rapacious, and unfeeling to the mass of men. (Hallam, *Middle Ages*, chap. ix., 2.) But classic Greece most certainly had no institution which in any way corresponded with our hospitals and asylums. It was not till the first century of our era that there arose a few small organisations for the relief of distress; but the Athens of Pericles, the Sparta of Agesilaus knew nothing of systematic benevolence, nor, perhaps, did they experience the emotional influences which lead to it.

Rise of Hospitals in Europe.

Gibbon draws a rosy picture of the general felicity of the peoples united under the Roman Empire in its first century or two. He conceals or forgets some darker features, and yet it is probably true that until within the last hundred years the world has never seen any great body of thirty or forty millions of people so generally peaceful, harmonious or prosperous as those who submitted to the Roman sway. The life in the streets of Rome or Alexandria must have been one of vivacity, mutual dependence, and trustfulness. Yet no such institution as hospital or asylum existed in all that wide population during these early times of the empire. Superb palaces for the wealthy, great theatres and hippodromes for the amusement of the people, temples and court-houses, triumphal arch and laborious aqueduct; but never a refuge for the mutilated soldier, the rotting leper, the worn-out toiler, or the helpless orphan. Lecky declares that "there appears to have been no public refuge for the sick," and he adds, "there is no other feature of the old civilisation so

repulsive as the indifference to suffering that it displayed". (*Rationalism*, ii., 240.) Hallam's testimony is to the same effect. (*Mid. Ages*, ix., pt. 1.)

The Roman moralists, especially Cicero in his *De Officiis*, speak of the "duty of charity to the human race," and in Lecky there are quotations from Seneca, Epictetus and Marcus Aurelius which indicate that men were growing ripe for the doctrines of universal brotherhood. "The Roman Stoics," he says, "declared that man is born, not for himself, but for the whole world." Their principles showed much tendency to spread; their teaching was a leaven that might have leavened the whole lump had time been permitted, and there is small reason to doubt that but for the great, though not altogether to be regretted, catastrophe which swept away the Roman civilisation, the world would have witnessed a thousand years earlier than it did the genuine awakening of the philanthropic spirit.

For Rome was making a good start and her progress was steady when the long series of barbaric irruptions began. She found perhaps some slender models for imitation in the *nosocomeia*, or sick-wards, and the *ptocheia*, or beggars' quarters of the later Greeks about the beginning of our era; for her first charitable building was an imitation of a Greek model. It was a sort of Sailors' Home at Ostia, the port of Rome, being a place wherein mariners, after shipwreck or other misfortune, might be cared for during a certain time. (Voltaire, *Dict. Phil.*, "Charité".)

But while alms were freely distributed in the Roman Empire, anything like really systematic benevolence dates only from the fourth century, and in its initiation the growing civilisation of the empire had the immense help of the warm philanthropic zeal of Christianity. The first field of its activity was found in the vast and miserable body of the lepers. Their disease was one peculiarly liable to awaken sympathy, for the victim lived long, but in a plight of most manifest wretchedness. It is true we perceive no signs of pity among the Jews, who, by the Mosaic legislation, merely drove the lepers out of the camp or dwelling. "He shall dwell alone; without the camp shall his habitation be." (Lev. xiii. 46.) They made no

effort to house the unfortunate, or provide him with such comfort as his situation permitted. Alms of food and money seem to have been scantily given, but sympathy was rare. Jesus was full of tenderness for these afflicted people, as we see from several passages, but nowhere is there any direction or any hint whereby benevolence might be led to the systematic care of men so loathsome yet so necessitous. The idea of such practical philanthropy had to grow through the centuries, and not till 370 A.D. do we find the first reference to a lazar-house or hospital for lepers. It was built by Basil at Cæsarea, with money provided for the most part by the Emperor Valens. St. Gregory describes it as being in itself a little city. (Gibbon, chap. xxv.) A generation later, at Constantinople, Chrysostom used for the erection of asylums, some part of those wealthy revenues which his predecessors in the episcopate had employed in vulgar display. It was about this time, and perhaps by his exertions, that a lunatic asylum was founded—the first of its kind, though probably but a small affair. (Burdett, *Hospitals*, i., 40.)

During this same fourth century the first hospital arose in Rome by reason of the munificence of a Christian lady named Fabiola. (Lecky, *Eur. Morals*, ii., 80.) The fifth century was marked by the erection of two or three similar institutions within the same city, one exclusively for lepers. It is not improbable that ere the fall of the Western Empire each great city had its hospital. They were in general only small and mean institutions; utterly inadequate and rather an acknowledgment of a duty than a fulfilment of it; but we may readily enough imagine that with the centuries they might have grown into an efficient system of relief. Civilisation, however, was destined to a long relapse, and the institutions of Rome entered on their period of confusion and paralysis under the shattering blows of Alaric, Attila and Genseric.

The conquerors adopted the new religion, but a change of faith does not transform men's natures. They still were barbarians, and had their long centuries to go through of purification and elimination before their minds were capable of that settled policy of sympathy which underlies a system of hospitals.

Whatever growth of this sort went on in the next six centuries was to be found among the Mohammedans. It is true that the conquering Arabs were almost as barbarian a race as the Goths or Vandals; but their supremacy was quickly won, and that great conglomerate empire of Moslem people known to Europe as the Saracens passed at a comparatively early date into a condition of tranquillity which was favourable to the growth of civilisation. In Europe, on the other hand, it was long ere the barbarous nations of the north had ceased from troubling, and had been embraced within the circle of the new faith; longer still ere they accustomed themselves to gentler modes of life. But even among the Saracens, such hospitals as existed before the twelfth century were obscure and probably unimportant. Not till their heyday glory in the reigns of Noureddin and of Saladin did these institutions assume importance by reason of size or number. Both of these enlightened monarchs dealt in frugal manner with their revenues in order to save as much as possible for the erection of mosques for the glory of Allah, and hospitals for the relief of man. Egypt, Syria, Arabia, were dotted with asylums supported right nobly from the royal funds, and the Barbary states as well as Granada were not slow in imitating the good example. A Hebrew traveller of the period (quoted Burdett, *Hospitals and Asylums*, iii., 23) declares that the caliphs had in their employment sixty physicians whose duty it was to tend the sick in these infirmaries; a small number no doubt for a large empire, but how far before any effort of Christian peoples in that time!

In Europe, it was France which best conserved the sparks that remained of the benevolent feeling, so promising, yet so rudely scattered at the fall of the empire. A council of the Gaulish Church as early as 581 A.D. instructs the bishops to take personal knowledge of all the outcasts, lepers, and indigent prisoners of their dioceses. A century later, there was founded at Paris what is now the oldest hospital in the world, the Hôtel-Dieu; but it was for nearly a thousand years after its foundation a poor and sorry establishment. In the times of comparative enlightenment which shed a lustre on the reign of Charlemagne, almonries began to appear in

connection with every Church, and most of the monasteries had small places attached, wherein the sick might be nursed and cured. In large measure these arose from the "merit-making" view of charity; dying people, or those concerned for the good of their souls, gave money for charitable purposes to the Church, which spent it partly on these monastic infirmaries, but to a much larger extent in building churches and founding benefices for clergymen. This became in the early middle ages quite a matter of public scandal. (*Encyc. Britann.*, "Hospitals".) And yet here and there the Church did its duty in more than a perfunctory manner. In 1080 Lanfranc built a good hospital for lepers and another for the sick poor, and in 1006 the Church at Venice built a hospital which was for those times a credit to the republic. But in general it was a disgrace to the Church that funds intended for charity were wasted in barbaric splendour. People lived with little emotion among festering masses of misery.

Take, for instance, the French manner of dealing with lepers, founded no doubt on the Mosaic instructions, a system that lasted till the fourteenth century. When a man was pronounced a leper, he was taken to the church and a burial service was held over him as if he were really dead; his heirs took all his property, and his wife was free to marry again. When, in the church, he had been solemnly sequestrated, he was taken to the door and thrust forth by the priest, with these words: "As to your little wants, good people will provide for them, and God will not desert you". From that time forward he was to come in contact with no human being save a leper like himself. A hut out in the loneliest fields or woods was to be his dwelling; though he was allowed to leave a receptacle on the highway for the alms of the passer. (Michelet, *Hist. of France*, Eng. trans., i., 348.)

The English customs were analogous. Pike describes (*History of Crime in England*, i., 239) how the lepers of London sat by the approaches to the city, showing their sores and begging for alms. This lasted till 1348, when, by a royal order, they were cleared away and warned to keep themselves apart in the country. They were not to speak to any one, nor to show themselves to any human being, even in quest of food.

But the donations of the charitable might be taken by a sound man and left on the outskirts of the wretched haunts wherein was scattered the village of frail huts, most miserable shelters from the bitterness of winter. Nor was it only here and there that a few lepers were gathered. Sprengel asserts (*Hist. de la Médecine*, quoted Buckle, *Civilisation*, i., 155) that in Europe of the fourteenth century there were 19,000 separate camps of lepers; places legally assigned to them for their outcast habitations.

Montesquieu says (*Esprit des Lois*, xiv., c. 10) that leprosy was little known in Europe till after the crusades. We know that licentious soldiers and poverty-stricken pilgrims brought it back in great streams which filtered all over Christendom. This was in part the reason why, in the twelfth century, the great orders of the Black Friars of St. Dominic and St. Benedict, and the Grey Friars of St. Francis arose and flourished. As Green says (*Short History of English People*, iii., 5), their work at first chiefly lay in the quarters assigned to the lepers. Unlike their predecessors in the Church, they actually spent in charity the money entrusted to them by pious people for benevolent purposes. It is true that corruption after a century or two set in, and some of these orders were known as the refuges of the lazy and hypocritical. Every student of mediæval literature knows the scorn and suspicion with which the popular feeling came to regard them. (Ranke's *Papacy*, i., 130; *cf. Margaret of Navarre.*) But at first they were filled with a noble zeal, and it was due to their exertions that by the end of the thirteenth century every leper or other incurably sick person could rely on sufficient assistance to keep him from actual starvation.

From time to time princes and wealthy people were stirred by these preachers to philanthropic efforts. St. Louis, in the middle of the thirteenth century, as Joinville tells us (p. 376), gave money to found "maladreries, maisons-dieu, and hospitals". He built an asylum for the blind at Paris, and a refuge for penitent prostitutes. He gave a little sum of money as assistance to every poor woman who was about to become a mother. We may, without risk of error, assert that by the fourteenth century there was in existence in France

a sort of nucleus for every department of benevolent activity. Monteil (*Hist. des Français*, i., 41) asserts, and no authority could be better, that in this century there existed hospitals "for the sick, for lepers, for the infirm, for the blind, for the old, for women lying-in, for children, for widows and for orphan girls". But these were as yet in an embryonic stage, and managed in slovenly style. The largest hospital then in the world, the Hôtel-Dieu at Paris, had only four men and nineteen women as its complete staff, and these, whether physicians, nurses, or servants, were all of them friars or nuns. At Lyons there were no men, but twenty female nurses, and these had to spend much of their time in begging food and medicine for the establishment from all the surrounding grocers and apothecaries.

These places would probably not have so soon existed but for the Church; and yet the inefficiency of ecclesiastic management began to be notorious; for the clergy had generally some ambitious abbey or cathedral to finish. They were pressed to send money to Rome; and while wealth could do so much in the world of politics to increase the influence of the Church, the poor and afflicted were forgotten. The enactments of all countries show how much this was felt by the people of the times. In England, Henry V. was a most pious monarch, and he inherited from his father the policy of making firm friends with the Church, yet one of his Acts, dated 1414 A.D., begins: "Forasmuch as many hospitals founded by noble kings of this realm and lords and ladies, both spiritual and temporal, to which hospitals they have given a great part of their property wherewith to sustain impotent men and women, lepers, men out of their wits and poor women with child, be now decayed for the most part, and the goods and profits of the same by divers persons, as well spiritual as temporal, have been withdrawn and spent in other uses". After which delicately allusive preamble other arrangements are provided for, but apparently, in the disorders of the following reign, they proved of little use in restraining misappropriations.

There seems to be no trace of hospitals in England till the twelfth century, when the Priory of St. Bartholomew in

London erected a small one as an adjunct to the church. It was a hospital only in name; the monks paid little attention to medical care, but trusted chiefly to the miraculous healing powers of the neighbouring shrine. However, the church was permitted by charter to hold yearly a three days' fair on an adjoining piece of vacant land, the profits arising from rents and licences to go to the support of the hospital. The well-known St. Bartholomew's Fair arose in consequence, and as it became the great annual market of the city, with shows and games which made these three days the carnival of London, its profits became very great. These, however, were intercepted for other purposes. Certainly the hospital failed to grow as the profits grew, and this was perhaps one of the scandals at which King Henry V. glanced in his preamble.

During the twelfth century the kings of England began to make small grants, either directly from the Treasury or preferably to be raised by the Church in the way of taxes from the district to be benefited, and these were to be spent for the good of the king's soul, in assisting the blind and the cripple. These efforts may have done good to the royal soul, but they were too small and irregular to do much for the sufferers of England. Far more efficient was the charity of the trade guilds which, in the thirteenth and fourteenth centuries, founded institutions for educating the children of their poorer members, for nursing their sick, for burying their dead, or reinstating those whom the chances of fire or flood had ruined. This had more of the ring of true brotherhood than the "merit-making" donations so generally made to the Church. It was not till the early part of the sixteenth century, however, that the charitable institutions of France and England shook themselves free of the incubus of Church domination. In other countries they had to stagnate yet a long time ere they received the new impulses then so notable in these lands. We may regard the Europe of the fifteenth century as being still on the level of modern China in respect to civilisation. Certainly its means of provision for sickness and poverty were then no higher than the indigenous appliances now existent in that empire.

The Era of True Beneficence.

The modern period, and with it what I have called the period of culture, is justly regarded as beginning with the sixteenth century. But though the processes of improvement began at that time, I should be disinclined to call any people cultured, that is generally alive to the importance of science, art, and literature, before the eighteenth century. In regard to the growth of sympathy, both of these periods form well-marked epochs; the sixteenth century saw the first national efforts ever made in the world's history to cope with misery; the eighteenth saw the beginning of the realisation of these efforts. The change began with France and England, but at first it wore a somewhat unsympathetic aspect. The indiscriminate "merit-making" charity of the people had covered the whole of Europe with armies of beggars wherein the stalwart but lazy rogue, and the whining mendicant friar jostled aside the maimed and the feeble in the scramble for the coin which the Christian tossed, less for the alleviation of their suffering, than for the future comfort of his own soul. Yet it would be to take up an attitude of unjust cynicism if we failed to perceive that a vast amount of true sympathy was imperceptibly blended in the charity of these middle ages.

However, the first preliminary to a wise system of benevolence consisted in sifting out the spurious from the genuine cases. The task was attempted in England and France from 1500 to 1580 A.D. In England, from 1494 onwards, Acts were passed to suppress begging on the part of the stalwart; and one of 1530 directed that in every country the justices of the peace were to license those who were really aged, sick or feeble, and these alone were to be allowed to beg; others were to be caught, whipped, and put in the stocks. (37 Hen. VIII., cap. 25.) The Act was only partly effectual, and five years later, a second Act provided that stalwart beggars persisting in their offence were to have their ears clipped off; and for a third offence to be executed. A somewhat stern provision for a statute of Charity! But on the other hand the authorities of counties and towns were directed to exercise

a friendly care of the aged poor, or the destitute sick of their districts. Poor-boxes were to be hung in conspicuous places of each parish to which all alms were to be consigned, and persons giving to beggars at their doors were to be fined. Children caught begging were to be taken from their parents and placed with farmers or mechanics who were bound over to teach them a useful calling.

This was in a measure effectual, so that in the next reign a further advance was tried in which it was provided that in every parish there should be erected a home for the relief of the aged and crippled; and bishops were directed to see that all householders in each district should be "willing and charitable enough to contribute to the maintenance of these places". This Act of 1547 is the first national effort ever made to recognise the responsibility of a whole community in regard to the needs and sufferings of its aged and disabled. But it was found ere long that there was too much left to voluntary discretion, and that the bishops had an impossible task to fulfil in attempting to induce all to pay when no law made it compulsory. Hence in the fifth year of Elizabeth's reign a step yet further in advance was taken and the English poor law system was founded. In the new Act it was directed that the justices of the peace in each district should assess the sum which each householder might be fairly expected to subscribe for the relief of the poor. He who refused to pay had to go to prison. The infirmary of each parish was regulated on a better basis, by three subsequent Acts which provided for the good management of "Hospitals or Abiding and Working Houses for the Poor". These were popularly called workhouses, for in each a store was provided of flax, hemp, wool, thread, and iron, on which all who were strong enough were to do a fair share of work before being fed. But the whole system was on a small scale, as we see by the proviso that no parish was to be assessed at more than eight pence per week; a sum which might be equivalent to about ten shillings of our money. Yet we can clearly perceive the changing features of the times and the growing feeling of sympathy as a duty, when we find no less than ten Acts in the course of eighty years directed to a national system of relieving indigence; in all previous ages

charity had never been the subject of so much as a single ordinance in England.

The changes which in England took a national form were carried out at precisely the same time in France, but in that country the regulations were local, and the result of municipal rather than of central activity. In 1531 Lyons forbade all begging within its jurisdiction, but provided for the distribution of a sou and twelve loaves of bread per week to those who were incapable of working. The funds for this purpose were to be raised from voluntary subscriptions, and the charitable were directed to reserve their alms to be placed in boxes hung in convenient spots. But at stated periods a procession of the poor and maimed was allowed for the purpose of stirring the hearts of the sympathetic. In 1578 Paris also forbade the practice of begging, and set up boxes for alms; the contributions to be distributed on a settled system by the officers of the city. Those incapable of working were to be fed with regular weekly allowances. The stalwart poor were to be paid by the municipality in proportion to the amount of work they should do in cleansing the streets or repairing the fortifications.

Metz, Lille, and other towns adopted the same system, and when it was found that the relief thus afforded pressed heavily on a few contributories while others hardened their hearts and refused to give, the municipal regulations fixed the amount of a small periodic tax to be levied for the assistance of the poor, so that by the end of the sixteenth century every district of France, equally with those of England, had its charitable organisation. Alms were now doled out by municipal officers, and those who gave directly to beggars at their doors were fined in both countries.

This was also the period in which hospitals began to appear as a definite feature of social organism. In the preamble of an Act of Elizabeth in 1572 we are told that there were then in existence four hospitals in the whole of England, besides places called *maisons-dieu*, probably dispensaries which had been attached to monasteries or to a few of the churches. But these latter were small and mean affairs; while the four hospitals were most of them comparatively recent. St. Bar-

tholomew's, as we have seen, was certainly of early date, but it had remained in a state of inefficiency, while the church misappropriated its revenues. In 1547 it was set free from ecclesiastic control; the whole of its buildings were made over for the use of the sick; the large public endowment of its fair-charter and its city property was used for the purpose of supporting the inmates and paying for medical skill. Six years later the hospital of St. Thomas arose, on the ruins of a suppressed monastery. About the same time another appropriation of church funds to charitable purposes was made when the Priory of St. Bethlehem was converted into an asylum for the insane with fifty beds, and became the well-known Bedlam. But the latter hospital only served to show the inadequacy of the relief afforded. For if the insane were then only half as numerous in proportion to the population as they now are, England must have had about 10,000 lunatics, while the utmost stretch of accommodation then provided never amounted to 100 beds.

If the lunatic were harmless, he was allowed to wander about, generally filthy and uncared for. If he were violent, he was chained to a post either in the open air or under a shed, and the friends or passers by tossed the ravenous creature a little food from time to time. Lecky says (*Europ. Morals*, ii., 90) that "in most countries their condition was truly deplorable. Blows, bleeding, and chains were the usual treatment." The prejudices of the times regarded the lunatic as one possessed of an evil spirit, and it was supposed that by an adequate amount of thrashing the demon might be driven out. Hence in the reign of Henry VIII. it was still a legal practice for any one who needed exercise to repair to the nearest lunatic who was chained up, and flog him with stick or cane. (Tuke's *History of the Insane*, p. 41.) In letters and diaries even of a later date one comes occasionally across references to cases wherein gentlemen of good and honest hearts thought they were doing God a service by thus beating vigorously some poor demented creature. But maniacs were not numerous, for they were generally destroyed. James I. in his book on "Demonology" tells us that "it is commonly by fire, but that is a matter of indifference to be managed in

every country according to the law thereof". But as to the general propriety of putting the mad to death, the royal author has not the smallest doubt, and he was merely the exponent of the general feeling of his times.

Amelioration began to appear in the seventeenth century, when, as Monteil says (iii., 286), hospitals for the insane, though of rude management, arose in various towns of France. But in regard to general hospitals also, this was an era of activity in that country. These institutions were now finally withdrawn from the control of the Church, and placed under the management of a committee of citizens in each town. In 1662 Louis XIV. directed that in every city, town and borough there should be erected an asylum for the sick and poor. These were in the main only the workhouses of the English poor law system, but they made some provision for sick nursing. This same monarch set a fashion which was ere long imitated in the chief nations of Europe. His great Hôtel des Invalides was the first instance of a retreat wherein the aged and mutilated soldier who had served his country could end his days in peace, free from the necessity of begging in helpless squalor upon the streets. The Greenwich Hospital of our own good Queen Mary, likewise Chelsea, were avowedly founded upon this model.

A humane innovation of this period in France was that each new hospital possessed a special lying-in room, wherein poor women might receive the care they needed in their time of suffering. But without prolonging the details of the inquiry, we may say that from the year 1720 France and England began that course of active beneficence which, by the end of the century, gave to every crowded centre of population a good hospital for the relief of the sick poor. All the fine institutions, with a very few exceptions, that are now engaged in this great work are of date subsequent to that year. The *Encyclopædia Britannica* asserts, with truth, that in London the eleven chief hospitals were founded or put on a proper footing between 1719 and 1747; while all the thirty-eight great provincial hospitals date from the period between 1710 and 1797. In Scotland the first hospital was not founded till 1736, though she had an efficient system of outdoor poor

relief before that time. Germany and Austria were both considerably behind this date in the commencement of practical philanthropy on anything like a reasonable scale.

Italy and Spain had outstripped both France and England in special departments, while falling behind on the whole. In Italy the national enthusiasm took the form of foundling hospitals. From the zeal of one man (Ranke's *Hist. of Popes*, i., 135) there sprang up an association of great influence, incorporated in 1540, which gathered funds for the foundation of orphanages, and ere the close of that century no large city of Italy was without its foundling asylum. Nor were the hospitals of other sorts forgotten, but the control of the Church prevented that degree of expansion which took place elsewhere.

In Spain the wave of enthusiasm provided the earliest systematic care of the insane. Valencia (1409), Saragossa (1425), Seville (1436), Valladolid (1436) and Toledo (1483) saw the erection of large lunatic asylums at a time when they were undreamt of in the rest of Europe. There had been, as Burdett tells us (i., 40), similar efforts in Germany in the twelfth and fourteenth centuries, but they had been purely local and transient. The Spaniards made the first effort on any considerable scale; but all writers (for instance, Burdett, i., 58) are agreed that the ignorance of the times prevented any wise treatment of the patients in these places; so long as the good men who founded them were still living to direct them they were places of true benevolence, but afterwards they degenerated into dens of filth and cruelty. The general hospital was an institution known in Spain in the seventeenth century, but it was without exception a poor and badly managed haunt of wretchedness.

It is not without reason then that the *Encyclopædia Britannica* calls the eighteenth century the true era of hospital building. Paul Lacroix tells us (*XVIIIth Cent. in France*) that though charity had previously existed "benevolence in the modern sense of the word does not date beyond the first half of the eighteenth century". It might be a wiser use of words to say that benevolence then began to ripen into beneficence. Joinville praises King Henry III. of England, because

he used to wash the feet of lepers and kiss them, and his own St. Louis, because he daily fed six score poor persons, cutting their bread for them with his own royal hands, and serving to them their beer. This foolishness is typical of the sympathy of the middle ages, which was benevolent rather than beneficent. In the eighteenth century it made way for the more sensible sympathy of the trained doctor and the white-aproned nurse. Paul Lacroix tells us that the five great hospitals of modern France, next in rank to the Hôtel-Dieu, were founded between the years 1765 and 1784; while in 1781 the great Hôtel-Dieu itself was remodelled and enlarged to 2500 beds, becoming by far the greatest and noblest institution of the kind up to that time.

The enthusiasm of the enlightened nations at this end of the eighteenth century ran greatly in the direction of a belief in human brotherhood. Such a feeling is fundamental in Rousseau; it glows in Schiller, it throbs in Burns, it shines with a quiet light in Cowper, and it is none the less charming in the homely sense of Franklin. It formed the philosophic basis of American independence, and to it was due in the first instance the vast upheaval of the French Revolution. However much the rabble of Paris may have distorted and demoralised that outburst, the general temper of the French people was more sympathetic and kindly than the world had ever seen before in a national enthusiasm. It showed this temper in that vast and ambitious scheme of public charity which the Convention formulated; too huge to be practical, yet providing a basis for much that Napoleon, to his lasting credit, realised in accordance with the wishes of the people.

Nineteenth Century Beneficence.

Thus was the nineteenth century ushered in as the time pre-eminently of beneficence. But the favourable start was facilitated in other ways, for the singularly sympathetic souls of a few great men at the end of the eighteenth century had taught the way which whole nations were soon to follow. In England, John Howard had effectually touched the hearts of

men in regard to the sickening horrors of prison life; Captain Coram in 1741 had reached the practical fruits of long efforts, and his orphanage was the first of Great Britain; but by the end of the century such institutions were beginning to be common. In 1749 the first maternity hospital of England was founded, and four others followed within five years. There had been both in Germany and in France occasional refuges for the blind, but in general, if poor, their plight was wretched. The first attempt to teach them and employ them systematically was made at Edinburgh in 1793, though France in 1784 had built a fine asylum for their relief.

To France indubitably belongs the merit of leading the way in regard to the deaf and dumb. Until the eighteenth century these poor creatures were treated as the objects of the special wrath of heaven, and Alfred de Musset's picture in *Pierre et Camille* of the dislike and superstition with which they were generally regarded is not in the least overdrawn. No effort of any consequence had ever been made to alleviate their brutal condition till, in 1760, the warm heart of the Abbé de l'Epée set him to the kindly task. In 1778 there was built in France the first asylum for their education.

With these preparations the world entered on the nineteenth century. It then had a total of less than twenty institutions for the deaf and dumb. In 1836 these were increased to 134, in 1883 they had become 397, and in 1893 their number was increased to 435. (Dr. E. A. Fay, *American Schools for the Deaf.*) In *Nature* (1894, p. 100) we learn that there are now over 50,000 persons in the deaf and dumb asylums of cultured lands, all carefully housed, comfortably clad and zealously taught. What an army of beings who must otherwise have been grovelling in an ignorance and isolation worse than that of the brute!

In the year 1800 England contained, according to Mulhall, only fifty-one hospitals, all told. In 1890 she had 496 hospitals. Nor does that entirely indicate the rate of progress, for the hospitals themselves had increased greatly in average size. There are now about 17,000 beds provided, wherein are nursed about 500,000 people annually, each receiving thirty-

one days, on the average, of the best medical care and the most skilful attendance. France at present spends £5,500,000 each year on her benevolent institutions. She has an army of 2348 physicians, with 8800 trained nurses, and 9560 other attendants, ministering to the sufferings of 500,000 patients who are well housed in 1557 spacious hospitals or asylums. Of all the children born, one-tenth see the light within the quiet, orderly, and skilfully conducted wards of maternity hospitals. Some may think that all this is a case of excess of zeal; that we are now overdoing the matter of charity. I do not share in that opinion, though no doubt we must, as time goes on, learn to be in some respects wiser and more discriminative. But that is nothing to the present purpose, which is merely to show the huge growth of the sympathetic feeling which human history has witnessed, and the very large proportion of it which belongs to the nineteenth century.

Indeed it is only the familiarity of it that blinds us to that most marvellous of human sights, the harmonious social life of a great modern city. Citizens without a weapon in their possession lie down each night in absolute reliance on the security of the community. Think of the general trustfulness implied in the huge operations of a national system of post offices; try to estimate the growth of social faithfulness that was necessary ere our present banking habits could become general; consider how readily we entrust our lives and those of our dearest to the faithful duty of locomotive driver or sea-captain; observe the enthusiasms that are kindled in theatre or concert hall, or crowded field of games or sports; reflect how often it happens that in his ordinary avocations upon the streets of a great metropolis one may pass 50,000 people each day for a whole year without witnessing a scuffle or serious quarrel. In a community of our modern type the total of deaths by violence does not exceed one person a year in 50,000, and only one person in 2000 is guilty of any serious offence against the general well-being. Think how the lifeboats girdle all the coasts, their crews facing death to lend assistance to strangers imperilled on the seas, whatever be their language or colour; think how far the human heart has

travelled on the road to universal sympathy when nations will go to the trouble of storing on lonely inaccessible islets whereon shipwrecked mariners may possibly be thrown, the provisions which shall keep them alive till succour comes.

How all this contrasts with the sentiments of the savage horde, its thirty or forty members creeping fearfully and suspiciously through woods that are fraught with danger from their own species; each lying down to rest with his spears by his side ready to be grasped in a moment. All outside of that little band are deadly enemies to be killed or tortured if seen or caught. It is a life of suspicion, dread, bloodshed and ferocity tempered only by the play of domestic affections, sweet so far as they go, but intensely narrow.

"What a journey," says Wilhelm Meister, "had human nature to pursue before it reached the point of being mild to the guilty, merciful to the injurious, humane to the inhuman." To that point of sympathy the leading nations have now advanced. See the infinite tenderness shown in these countless hospitals to the wreck who has drifted thither to end his career of drunken folly; to the woman who has wilfully and wantonly chosen a path of vice, and now finds the best of skill, the gentlest of nursing, without one word of reproach. Humane to the inhuman! Look into the great gaols, and see with what considerateness those are treated whose lives have been ferocious, and callous, and even murderous, towards the very community which now refuses to be revenged.

But we flatter ourselves if we dream that we are anywhere near the end of the process; we flatter ourselves if we forget that Europe spends upon war alone much more than she spends on all her schools and hospitals, all her culture and philanthropy, put together. We flatter ourselves if we forget the masses of misery yet unhelped in any adequate fashion, if we forget that while some lives are heaped with luxuries till they pall upon the taste, others, without fault of their own, can scarce command the reasonable comforts, or even the bare necessaries, of existence.

But slowly and with measured pace comes the stage of the middle culture, when war will be abhorred, and national animosities will look like horrid spectres of the past; when

artificial distinctions of unmerited rank will no longer divide the classes of men with barriers of pride and presumption; when the crushing inequalities of wealth will no longer condemn the peasant to bow obsequiously to the squire, or the valet to cringe as the humble slave of him on whose capricious goodwill his livelihood perhaps depends. And in a yet farther age we may look forward in dreams to the promised times of the higher culture which our remote descendants may see, wherein shall be no army of police to compel to order, nor any government needed to restrain the offender; for all will move obedient to an innate instinct of sympathy, the jarring elements having been eliminated by the long process of the centuries. As far as the civilised man is now advanced beyond the savage in mutual trust and aid, so far will those fortunate days be beyond our own in that brotherhood which will make each man feel secure in an absolute reliance on the good faith and sympathy of all his fellows.

CHAPTER XIII.

THE GROWTH OF SYMPATHY AS SHOWN IN WARFARE.

The Warlike Elements of Society Destroy Each Other.

The growth of human sympathies is nowhere more distinctly seen than in the long story of the lessening ferocity of warfare. Yet before we begin it we cannot too strongly emphasise the fact that not by any teaching, not by external influence, has this mitigation been wrought. It has been in the main the result of a slow and almost imperceptible process of elimination, which nevertheless, by being persistent and cumulative, has had the most marked results. For it is clearly evident that war on its broadest aspect must clear away the warriors, and so must necessarily leave more room for the peaceful to pursue unnoticed their quiet lives, so that these become by preference the parents of the following generation. It is of course to be remembered that there are conflicting influences at work, and a people grown too peaceable has been always liable to extermination, or ruin, or slavery at the hands of one more warlike. But at all times the eliminating influence of war would tend to the suppression of the most peculiarly martial type. That sort of nature which is represented in a Cœur-de-Lion or a Charles XII.—which passionately loves war for its own sake—runs the utmost chance of being slain before it reaches a mature age. It is true that many of the most renowned generals have lived on into ripened years, but it was part of their skill that they were not themselves passionately addicted to the combat of their own bodies against those of their enemies. In general their valour was undoubted, but it was not their function to fight, but to use the instinct of the really fighting man as the

chess-player employs the faculties of his various pieces. But when a forlorn hope is summoned to enter a breach, the volunteers are they who delight in danger, to whom bloodshed has a certain charm. If three-fourths of them are killed off, the human race is thereby relieved of a certain proportion of its most extremely martial type. We may admire their valour and lament their doom, but none the less the sum total of the fighting instinct of humanity is lessened. As the advance of civilisation proceeded, the rate of this change rapidly increased; for at the stage in which a community is composed on the one hand of peaceable souls who, hating bloodshed, stay at home, and on the other of a professional warrior class, who for love of adventure or innate inclination to cruelty, or for mere ambition, go abroad and are knocked on the head, there will be a manifest tendency for the new generation to be bred from the former section rather than from the latter.

When a Roman emperor led an army of 50,000 men into a foreign land, he rarely brought back 20,000, and if the campaign were long, a constant stream of reinforcement was required to make up the heavy loss by battle and disease. Carry this process onward in all lands through all the centuries and it must have had a mighty effect. In England when an Edward III. or a Henry V. proclaimed an expedition into France, 30,000 or 40,000 of the most restless souls in the kingdom would rally to his banner; they would sail away in joyous hope of fray, and capture, and spoil. As a rule, only some sorry fraction, a quarter or a sixth, of these warlike spirits ever returned, and no system could be more nicely calculated to eliminate the unsympathetic, the disorderly and bloodthirsty elements of a nation. Louis XIV. was to France the means of clearing away tens of thousands of the martial spirits of the nation, not only the cut-throat class, but many finer spirits who made war in a worthier temper. But whether it was a military ardour which we may respect, or a mere rabble of scoundrels, food for gunpowder, they were effectually cleared away. On the other side, many a thousand of the same class did William of Orange and Marlborough drain out of Eng-

land; and while these found early deaths, the more peaceably disposed of the nation stayed at home and reared their families.

This weeding-out process is fairly well marked in the stages of barbarism and lower civilisation; for among savages, since all men are warriors, all take their chances of an early mortal wound; and among most of them, as we are told by many authorities, the warrior rarely dies a natural death. Yet even here there is a selective process; those chiefly noted for love of strife and personal prowess being the earliest to disappear. In the next grades, where wars are constant, but a special class fights, while the rest carry on the various industrial pursuits of the community, the eliminating process must necessarily cause a steadily increasing preponderance of the more peaceful elements.

How very decided this process must at one time have been is not readily to be guessed; but though we have no general means of estimating its extent, the student of history may observe most suggestive indications. For instance, on the barbarian level the lives of kings and potentates can be shown to have been greatly shortened by the prevailing practice of war, and an examination of the lists of the monarchs of any European people will reveal sufficiently how true are the words of Jesus when he says, "They that take the sword, shall perish by the sword". (Matt. xxvi. 52.) In England, for instance, whilst it was customary for kings to be warriors, about one half of them perished by violence. Of the Saxon monarchs nine out of twenty so died, and their average age amounted to only thirty-eight years. Of the sovereigns from William the Conqueror down to the end of the Plantagenet line eight out of eighteen died by violence, but their average age had risen to forty-eight. Since the beginning of the Tudor period, through what are regarded as modern times, peace has been vastly more prevalent in England, and monarchs have been very little in the field; out of nineteen, only one (Charles I.) died by violence, and their average age rose to fifty-eight. The same line of inquiry applied to France brings out even more clearly the fact that the warlike have short lives.

This age-long, silent, and unconscious process has been operative along with the other agencies of increasing sympathy, in altering the character of warfare. In modern times it has sometimes happened that the atrocities of a small section of an army have given to the whole an unenviable notoriety. It must then be evident, that if that section could have been suppressed the general character of the warfare waged would have appeared quite different. But this is precisely what has been happening along all the course of history, the ruthless and bloodthirsty having been eliminated. When a European nation condescends in its wars to make use of savage allies it has generally been scandalised by their conduct; what that nation used to do itself quite regularly some thirty generations ago now seems intolerably inhuman, and the change is very naturally set down to the effect of teaching. But in the main it has been due to a definite alteration in human nature, the European at his birth being richer in sympathy by reason of the persistent culling from among his ancestry of those elements which would have increased the blend of fierceness and vindictiveness in his nature.

War among Savage Races.

With the savage, though the acquisition of food is necessarily his most engrossing business, yet warfare is his chief delight, his only passport to consideration, the sole pursuit that partakes of the enthusiasm of a fine art. Livingstone, in a conversation already alluded to, admits us into the savage view of slaughter. (*Miss. Travels*, p. 159.) "When the old bushman's heart was warmed by our presents of meat, he sat by the fire, relating his early adventures. Among these was the killing of five other bushmen. 'Two,' he said, counting on his fingers, 'were females, one a male and two were calves.' 'What a villain you are,' said I, 'to boast of killing the women and children of your own nation! What will God say when you appear before him?' 'He will say,' replied he, 'that I am a very clever fellow.'"

As we have already seen, the lives of the lowest savages

form one unintermittent warfare; they never make peace among themselves. Their rule most generally is that wherever and whenever a stranger is seen he is forthwith to be knocked on the head. For instance, the Andamaners killed every shipwrecked mariner thrown upon their coast, and of the many Hindoo convicts who reached these islands, all but one were slaughtered "with the most determined ferocity". The rude savages of Brazil are never at peace, and, whenever they have an opportunity, they "attack the dwellings of any other Indians situated in solitary places, and murder all the inhabitants". (Wallace, *Amazon*, p. 354.) Robertson, in his *History of America* (note xlvi.), quotes the testimony of a German who was for some reason kept alive as a slave for nine years in a Brazilian tribe; his experience with all its gruesome details sufficiently indicates the innate thirst for bloodshed which actuates such tribes and the diabolic pleasure they take in torturing the captive who falls into their hands.

Among most of the middle savages, however, we see some little tendency to the ratification of peace from time to time, between neighbouring tribes. The Australian blacks not only made such compacts but sometimes kept them for several years. Their warfare, however, had a horrid aspect. The manly stand-up fight was little known, though occasionally practised. More generally the work of destruction was done in a night attack. A band set out with food for several days. They traversed with stealthy swiftness the silent wildernesses, till they picked up the track of the hostile tribe, concealed themselves near its camp, and at midnight burst upon the sleeping inmates, butchering till their hearts were sated. The kidney fat of the murdered wretches was torn from their flanks. Women and children were generally involved in the same carnage. Such also was the character of Hottentot warfare before the advent of white men. They spared neither man, nor woman, nor child.

Among the higher savages, while war is the most exultant pursuit of life, it assumes a form a little more civilised. The North American Indian tribes used to make very solemn treaties of peace, which would often for a long time be inviolably observed, and it was customary, when war was in-

tended, to send an open defiance and declaration of hostilities. But the conflict itself was rarely an open fight: strategy was always preferred, and if a warrior could deal an unsuspected blow at an enemy, it was quite as honourable a victory as if he had vanquished him in obstinate combat. In a general engagement, as Schoolcraft tells us (iv. 53), "quarter was neither asked nor given," and the victors took the scalps of women and of children to add to their trophies. But it was a practice frequent enough for these to be saved alive and kept for slaves: while all men who were caught were put to death with prolonged tortures. Among the Koniagas, for instance, the male prisoners were stretched on their backs upon the ground, each limb fastened to a stake, and for three whole days the fiendish work went on: the victim being unbound and fed each evening to make him better ready for the morrow's sport. On the third evening he was put to death. Some races, however, had the kindly custom of adopting many of the children who were captured, while the women were generally saved to be concubines. Lewis and Clarke speak of those among the Cherokees as being well treated, though made to feel their inferiority. Any such mercy, however, was rarely extended to men, who were forced to pass in bonds down a long lane of the victorious tribe who beat them mercilessly, reviling them as they passed, and after a prolonged period of torture they were always burned alive with many savageries. Morgan tells us that the Iroquois, who were the most advanced of the North American tribes, always regarded every people as being naturally at war with them unless a formal peace had been ratified. But he mentions a circumstance which is indicative of their improved level of feeling; a hostile leader who had won their admiration by his exploits was often, though put to death, absolved from the usual torture; sometimes even he might be liberated in a fit of admiring generosity.

The South American tribes which stand upon the higher savage level are generally accustomed to spare the women and children, and very often even the men are saved to become slaves. But the best of them are addicted to the practice of torturing the more obnoxious of their enemies who

chance to be captured. Guinnard says (*Three Years' Slavery*, p. 125) that the Patagonians kill all the men and the old women, reserving the younger women for their own use, and rearing the children to be slaves. The inhabitants of Kamschatka, who were on this level of progress, used to spare the women and children, but hung the male prisoners up by the feet, tortured them, tore out their entrails, and ended either by hewing them in pieces or by burning them. (Spencer, *Desc. Soc.*, v., 34.)

We have already seen how history has the same tale to tell of Europe in its savage days. Herodotus relates (iv., 64) how, on the banks of the Danube, 3000 years ago, the Scythians used to solemnly immolate the prisoners, drinking their blood, flaying their bodies, and preserving their scalps. Among the early Teutonic races, ere they entered the barbarian level, we see in the dim light of the ages most remotely known, that women and children were involved in the indiscriminate slaughter, though never apparently reserved for torture.

Warfare among Barbarians.

Barbarian races are distinctly less inclined to regard warfare as the only pursuit that is worthy of a man; it is still the noblest, but when houses are to be built and carved, canoes to be framed and decorated, songs to be admired, and the priest's incantations lead him to influence, the opening of new avenues of emulation serves to divert attention in some degree from exclusive dreams of sanguinary glory. There is now the field to be cultivated, and numberless other pursuits and avocations begin to spring up out of a more settled life. Moreover, the palisaded village, or pah, or hill fort, now makes warfare more toilsome and protracted; it requires more of sustained effort than the savage is ready to exert.

Thus warfare becomes less chronic, though it remains almost as merciless when it does occur. Thomson says of the Maoris (i., 124) that though nowise slow in finding causes for strife, they were always reluctant to strike the first blow, and

mediation was often resorted to for the purpose of avoiding a conflict. Warfare in general consisted in pitched battles, and when the field was fought the victors carefully carried away their own wounded in light litters, while the wounded of the enemy and all captives were insulted, slain and eaten. Sometimes a chief was tortured, but wanton cruelty of that sort was no prevailing feature; the cannibal feast on the bodies of the slain being the usual method of satiating the thirst for vengeance. But many of the captives, almost all the women and children, very often some of the men, were kept as slaves. Peace was ratified with many solemnities, and in general strictly observed until new causes of discord arose.

But in some respects this is a favourable specimen of a lower barbarian race. All the Papuan people are rendered peculiarly ferocious by the practice of head hunting already described. With them warfare is chronic, and, as a rule, women and children are slaughtered equally with men; but only the male prisoners are tortured. Wilfrid Powell relates how, in New Britain, a prisoner was fastened flat on the ground and a fire kindled on the pit of his stomach. But in general, men, women and children are consumed in cannibal repasts. We have seen how favourable is the account given by Wallace of the Dyaks in their domestic lives, yet their warfare is most atrocious, and their women give them no rest, for ever urging them off upon head-hunting expeditions. Men, women and children are indiscriminately slaughtered, and their heads brought home. If captives are ever made, they are tied to stakes in the village, and the cruel population glut their vengeance by continued stabbings with knives in parts where wounds are not immediately fatal. (Karl Bock, *Head Hunters*, p. 220.) The Fijian women used to accompany the men to battle, and when they saw a wounded enemy on the ground they rushed in to drag him away and prepare his body for the oven. (Turner, *Polynesia*, p. 426.) Among the Nicaraguans and other races of Central America the warlike customs usual among the lower barbarians prevailed; women and children were very often spared to be slaves, but the majority of men made prisoners were cooked and eaten. Sparrman says that the Kaffirs always slew their

prisoners, but most travellers speak of them as having killed only those caught in arms, while women, children and unarmed men were enslaved.

When we pass to the level of the middle barbarians we find on the whole a very definite progress. Wide discrepancies, of course occur, for warlike ferocities will linger long in one race when they have been mostly banished from a neighbouring people otherwise not greatly in advance. Out of about forty negro races for whom I have gathered information, thirteen are recorded not to slaughter any prisoners whether men or women, but to reserve all for slavery or ransom. Others, more cruel, as the Ashantes, the Dahomeys, the Calabar tribes, and the Segoos, saved the majority of their prisoners to be slaves, but they reserved a few of the males for public sacrifice. Some yet more cruel, such as the Mandingos, the Malinkops, the Kimbondas and the Gallas, killed off the feebler of their prisoners, both the very aged and the very young; the rest they sold to slavery. Others again, such as the Zulu and Somali tribes, neither gave nor expected quarter. All prisoners, except the more attractive girls, were involved in one promiscuous carnage. Monbuttos, Fans, and Marawis used to kill all whom they could capture, and each warrior was entitled to eat a portion of any slaughtered chief.

The practice of selling an enemy into slavery seems no great moral advance on that of slaughtering him; yet, rightly considered, there is some diminution of bloodthirstiness when vengeance can be conquered by avarice. If a man is filled with an implacable hatred against an enemy whom he has within his power, he will absolutely refuse to sell for any money the sweet orgie of revenge. If he can be induced to spare the life by any pecuniary bribe, his hatred is clearly not the mastering principle of his nature. We shall see, in subsequent chapters on the growth of law, that the progress of this change by very slow degrees converted the exaction of private vengeance and all the horrors of the blood-feud into acceptance of the wergild or compensation money, thereby effecting a mighty work in securing domestic peace and good order. So in warfare, when the barbarian is willing to

forego the immediate and tempestuous gratification of the axe buried deep in the enemy's skull, and restrains himself for the more distant and sedater pleasure of the price of slavery, then the predominance of the more brutal passions begins to wane. The negro tribe has still an abundant ferocity; the heads of the slain are gathered from the battlefield to adorn its dwellings; if it surprises a hostile village, all who resist are ruthlessly slaughtered; but the majority are gathered into a dull and manacled heap of despairing misery; the village is fired, and from the smoking desolation the cavalcade moves off. Upon the march the victors notice all those who show signs of being unable to keep up with the rest; elderly women are thus in especial silently marked, and at a favourable opportunity the driver steps up behind and, with one sharp blow on the back of the neck, despatches the victim, whose body, relieved of its manacles, is left a feast for hyænas. (Sir Samuel Baker, *Nyanza*, p. 375.)

Herein is no great advance of kindliness, but there is some decrease of ferocity when love of gain can in large degree overmaster the thirst of blood that maddens the warrior in the hour of conquest. But by far the most solid advance that is made within the barbarian level is the differentiation of a warrior class from the rest of the community. The foundations of a new state of society are laid when the passions and delights of warfare are reserved for a minority, while the mass of the people proceed in peaceful fashion with their daily toil. At this stage, for the first time, men may grow to a good old age without having ever wielded a weapon, and thousands may live and die without either the need or the wish to shed the blood of a fellow-creature. From this peaceful mass, as already described, those of turbulent passions and sanguinary instincts are year by year drafted off to find, in the course of a comparatively short career, a premature grave; and each succeeding generation hungers less and less greedily after warfare.

Thus Ellis, in describing the Tahitians, speaks of a farming class, who rarely interfered in any way with warfare. In Madagascar, in Abyssinia, in the Malay States, and indeed in all countries that have reached the higher barbarian level,

large populations are found whose lives are of unbroken peacefulness. Even if wars be of perpetual occurrence between the rulers of contiguous peoples, they stir the deep passions of only one class of men in each; to these alone is confined the privilege of ferocity. It is true they are accustomed to make use of it, and the warrior element, even of the higher barbarian races, is often stained with the foulest enormities. Ellis says that in the Sandwich and Friendly Islands a whole island has been swept absolutely bare of its population by the ruthless havoc of a conquering army. He gives many hideous details of the enormities perpetrated by a warrior class (i., 304). But in general he says (i., 292) that none were slain save on the field of battle, and even there the prostrate foe who asked for mercy would sometimes find it. In sea-fights, however, quarter was rarely given (i., 312), and after any battle a few picked prisoners were generally sacrificed to the war god. Drury, writing of the people of Madagascar in 1700 A.D., says that in warfare they never killed women or children, though men were always slain, if not in battle then after it, if they happened to be captured. Gobat tells us that the Abyssinians (p. 304) rarely kill a prisoner, but other writers are less favourable in their description.

The accounts given of Malay warfare have little to relate of heartless cruelty or wanton torture. Raffles says that the Javanese in their quarrels are "unusually free from unrelenting and bloodthirsty revenge" (*Hist. of Java*, i., 248), and Crawford speaks of the bulk of the population as a "peaceable, docile, sober, simple and industrious people". (*Hist. of Indian Archipelago.*) Their soldiers are reckless and take a foeman's life as readily as they would lose their own, but they exhibit no diabolic delight in atrocity, nor do they invent ingenious ways of satiating their revenge, as among the savage races of their own islands, the Battahs, the Niasese and others.

In the wars of Baluchs, of Tatar races, of the nomad Arabs, it is unusual to slay the helpless. The Bedouins, for instance, though they regard it as a disgraceful thing to ask for quarter, yet always grant it if demanded, and they

never slaughter women or children. Among all Arabs, even before the time of Mahomet, the usages of war were in so far modified that "the maxim of honour required in every private encounter some decent equality of age and strength of numbers and of weapons" (Gibbon, chap. l.); that is, it was no longer allowable for a number of men to wreak their vengeance on an enemy if they caught him alone and unarmed; at the beginning of our era it had become usual for an annual truce to be observed of several months in which all intertribal warfare was abandoned.

The Jews of old displayed a steady progress of sympathy in their warlike customs. At first they were mercilessly ferocious. In Deuteronomy (xx. 16) we read: "But of the cities of these peoples, which the Lord thy God doth give thee for an inheritance, thou shalt save alive nothing that breatheth," and in the same book (xxv. 19) the Jews are told to "blot out the remembrance of the Amalekites from under heaven". Here and there a trifling gleam of mercy breaks through. In Numbers (xxxi.), though they are ordered to exterminate all their enemies, yet they are allowed to save alive all the girls "that have not known a man by lying with him," and in Deuteronomy (xxi. 10) it is provided that if a Hebrew had chosen such a captive maiden to be his concubine, he must not subsequently sell her. Unrestrained barbarity, however, was the general characteristic for long centuries. The prophet Samuel insisted that Saul should "smite Amalek and utterly destroy, slaying both man and woman, infant and suckling, ox and sheep, camel and ass," so comprehensive was the bitterness of his hatred. Saul accordingly made a most horrid desolation of the land, but saved alive King Agag. Samuel, however, would tolerate no mercy, and, in his capacity as high priest, "hewed Agag in pieces before the Lord in Gilgal," in other words offered him up a sacrifice to his god of war. (1 Sam. xv. 33.) We read in Judges (i. 5) that sometimes if the Jews spared the lives of prisoners to make slaves of them, they cut off their thumbs and great toes. Long and dreary were the centuries of Jewish atrocity lasting through the days of King David, who "smote the land and left neither man nor woman alive".

(1 Sam. xxvii. 9.) At Rabbah (2 Sam. xii. 31) King David exercised a savage ingenuity in torturing his prisoners; for he killed the people with "saws and harrows of iron, and axes of iron, and made them pass through the brick-kiln. And thus did he unto all the cities of the children of Ammon."

But though, as the Jews moved on from their grade of barbarism, all this declined, enough of bloodshed filled their history in every era, yet a visible decline in ferocity can be observed in the story of Josephus as the people grew more settled, while large bodies of men began to devote themselves to industrial pursuits, and to avoid the fierce intoxication of war. And so we find Isaiah dreaming that famous vision of a time when "nation shall not lift up sword against nation, neither shall they learn war any more". This is an ideal which would by no means have been applauded by the men of Samuel's time, but it runs more or less distinctly through the later prophets. Micah, for instance (vi. 8), tells the Jews: "What doth the Lord require of thee, but to do justly and to love mercy?"

Precisely the same change may be traced in following the story of Babylon and Assyria on into the period of the Mede and the Persian. The flaying of prisoners alive, the exquisite tortures reserved for the men, the awful slaughters in which the naked corpses of women and children were cleared out of the street in clammy heaps to make room for the victors to proceed, till not a soul was left alive—all these gave way to milder customs in later times. The Egyptians pass into the view of history only when they have fairly well emerged from the primal ferocity of mankind; so also the Chinese as seen in their annals, and the Hindoos as we have glimpses of them in their sacred books, had reached the grade of higher barbarism with its more merciful customs ere we know them.

Even the Greeks had probably made much progress when first they became visible to the historic eye. In heroic times we see a tendency to transition; prisoners are apparently never reserved for torture; but very often men, women and children are involved in one universal slaughter. In the *Iliad* (vi., 45), when Menelaus has been tempted by the offer of a rich ransom to spare a noble captive, in strides his wrathful brother

Agamemnon and drives his spear through the defenceless prisoner, then this "king of men" shouts his orders:—

> Let not one from the slaughter escape, not even the babe whom the mother
> Bears in her womb, but let all unburied, unmourned for, lie rotting.

But there are also indications that in the heroic times the temptations of avarice were inducing the warrior often to save the young and handsome woman or the noble youth for whom a ransom might be offered. Some progress had probably been made when the outbreak of the Peloponnesian war roused into new life the black passions then partly lulled. The Platæans massacred every Theban who fell into their power; the Spartans seized every Athenian they could reach, whether inoffensive merchant or unarmed sailor, and cast him headlong over the precipices of Mount Taÿgetus. (Thucydides, ii., 67.) The Athenians retaliated by the massacre of all Spartan prisoners, whose bodies they cast to rot on the beach hard by their own Piræus. When the Athenians captured Skione, they massacred every man in it, and sold all the women and children. This would represent the warlike custom of a middle barbarian race, but the well-known story of Mitylene is curiously suggestive of the wavering between old ferocity and newer sentiments of mercy. When it had surrendered, the Athenian general, acting on the altering feelings of the times, by no means took it as a matter of course that he should massacre the population. He sent to Athens for instructions, when the popular assembly, swayed by the lungs of a demagogue, voted destruction for all the men, slavery for the women and children. But when the assemblage had retired to their homes, and reflection had taken the place of passion, the better sentiments, then slowly spreading, prevailed in their minds, and when they met next day they reversed the order; the trireme with the revocation just reached Mitylene in time to stay the hands of the soldiers who were about to begin the work of butchery. Nevertheless, according to the revised orders from Athens, 1000 of the leading men were slain, but the rest were pardoned. In the story as told by

Thucydides we witness the conflict of the new humanity against the old spirit of warlike ferocity.

Eleven years later another incident showed in a different fashion the same uncertainty. The fair and populous island of Melos had desired to remain neutral in the war, and Athens felt aggrieved thereat. Finding themselves too weak to resist, the Melians surrendered, when every man on the island was slaughtered, and every woman and child sold into slavery. Not one inhabitant was left upon the island. But a deed such as this was now out of harmony with the feelings of Greece in general, and in the pages of Thucydides we see how he considered that the general horror and condemnation thus aroused became the first step in the decline of Athens.

Warfare among Civilised Races.

From the time of the Peloponnesian war the military usages of Greece show a manifest decrease of cruelty. The massacre even of the male population of captured cities becomes uncommon and dies out. Even though Thebes had exasperated Alexander by a second revolt and the destruction of a Macedonian garrison, he contented himself with merely selling the populace. Doubtless the 440 talents received by way of sales account was part of the inducement, but the influence of pity in the breast of the conqueror is very evident, and Plutarch tells us that in subsequent years he expressed regret for the severity with which he had treated the city, showing his pity in a practical way by often bestowing special kindnesses on Thebans when he chanced to meet them. The wars of Alexander in the East were characterised by great mildness, save only in the case of Tyre, whose whole population was sold into slavery, "all but 2000 who, nailed to crosses, hung along a vast length of the sea-shore". (*Quintus Curtius*, iv., cap. iv.)

Grote describes some of the later Spartan generals as having treated their prisoners with a noble generosity (viii., 224, 365). But by turning to Plato we shall probably find the highest level in this respect to which the Greek mind ever

reached. In the *Republic* (v., cap. xvi.) there is found an elaborate exposition of that which is permissible, and that which is wrong in war. It is wrong to destroy Greek women or children, or even Greek men who are taken captive, save only those who may be culpable as having instigated the war. Nor should any Greek sell another Greek to be a slave, nor should houses and farms be destroyed; and Plato considers the not uncommon practice of mutilating the bodies of the dead upon a field of battle to be the mark of a small and ungenerous mind. But for the most part the mercy which Plato recommends is to be shown only to Greeks; the treatment of other peoples may properly, he thinks, be of a much less merciful type. Moreover, we see by the *Laws* (xii., cap. ii.) that Plato regards the warrior as the highest type of man and expects every citizen to be stout with his weapons.

The Romans had already accomplished no little portion of their journey on the way to mercifulness when we first can judge of their character; but that there was a time when, like other primitive people, they slaughtered all enemies, is made very clear by the lingering customs preserved by the conservatism of religion. The sacrifice of prisoners to the gods is always, in any country, to be regarded as the survival of an earlier practice of deliberate postprœlial massacre. Now, we know that the Romans down to a late date offered up human sacrifices, the custom, however, growing rarer as the centuries advanced. In 225 B.C. the priests buried alive in the forum two captive Gauls, a man and a woman. (Mommsen, ii., 78.) The practice cannot have been uncommon of sacrificing captives and criminals to the gods, for in the comparatively civilised times of the year 96 B.C. it had to be prohibited by law. But, in spite of this enactment, human beings continued to be sacrificed occasionally down to the time of Cæsar, who publicly offered to the gods two soldiers; while Augustus, Trajan, Commodus, and later emperors, are all known to have sacrificed men, and more especially maidens.

Grotius, in his great book *De Jure Belli* (iii., cap. iv.), gives a learned view of the laws of war as understood by the Romans. They gave full permission to slaughter women and infants; not only those of the enemy, but those residing

within the territories of an enemy. In short, "the fecial laws of the Romans declared that all things are lawful to the conqueror". Yet he praises the later generals for being better than their laws. For instance, he says that some of them condemned the ravishing of women at the capture of a city, and relates how Marcellus at Syracuse and Scipio at Carthage took great pains to preserve the honour of the defenceless women.

But indeed at an early period of their history the Romans showed more of restraint than other peoples of the same time. They always, before commencing hostilities, made a formal declaration of war, an unmistakable sign of growing generosity. (Mommsen, i., cap. ii.) It is true that this applied only to immediate neighbours; as for all beyond, they were considered to be natural and perennial enemies. As Cicero says (*De Officiis*, i., 12), "Among our ancestors a man would be called an enemy whom we now call only a foreigner". Yet the early success of Rome depended in a large measure on her capacity for showing mercy to the conquered. Each of the surrounding peoples that she defeated was not only preserved alive, but allowed to retain two-thirds of its property uninjured. Nay, more, it was admitted into some degree of citizen partnership; and so in succession, Tusculans, Æquians, Volscians, Sabines and Hernicans, dealt with in this generous fashion, increased the conquering strength of the victorious Romans. Niebuhr asserts that "the different nations managed their own affairs, retained their own laws and languages; Rome being but a metropolis to them, while they were the provinces". He remarks that no previous nation of antiquity had ever displayed so great a tolerance to its subjugated enemies. Occasionally, when the Romans considered themselves to be ill-treated, they showed themselves quite capable of a ruthless severity. In the second Samnite war, wherein they complained of deep treachery, they "roamed about like hell-hounds, wasting the country most ruthlessly, and destroying every living thing that they met with". (Niebuhr, i., 503.) But in general the Romans abstained from slaughter, and at the utmost exacted a ransom from their prisoners.

He who reads the history of the later wars of Rome will

notice the struggle of the two contending influences, the ancient and fundamental ferocity, checked and restrained by the growing impulse to mercy, yet at times breaking through. Though Metellus was thought worthy of high praise for his moderation after the capture of Syracuse (212 B.C.), yet the city was utterly destroyed, and all the inhabitants driven out to find new homes. Two years later, when Agrigentum was captured, its fate was worse, for its garrison was massacred and all its people sold into slavery. Yet the manner in which Sicily in general was treated, the clemency shown to its people, who were suffered to keep their property intact, and the humanity by reason of which, before many years were over, the whole island, still peopled by its former inhabitants, was converted into a peaceful and most prosperous province, all give ample indication of that mildness of temper which more than anything else denoted the superior civilisation of the Romans.

When Carthage was captured (146 B.C.), after a long and bitter warfare, such as must have called out the most violent animosities of which the times were capable, only a few of the chief citizens were slain. It is true that 30,000 men and 25,000 women were sold into slavery, but it marks a stage in progress that there was no wanton slaughter. (Mommsen, iv., 1; Niebuhr, ii., 244.) In the same year, when Metellus captured the rebuilt Thebes he "sought by the utmost moderation to induce the Greeks to abandon further resistance" (Mommsen, iii., 48), and allowed all the Thebans to depart unhurt, merely destroying their fortifications. But immediately afterwards Mummius treated the populous city of Corinth much more severely. All the citizens were either slain or sold into slavery, and the Roman general would have swept the whole population of the Peloponnesus into the slave market but for the interposition of Scipio in the Senate, who secured a more merciful decree. The general policy of the Roman Government to conquered Greece was, in the words of Mommsen, characterised by "singular indulgence"; "it is affirmed, and may be readily believed, that with the direct government of Rome security and prosperity in some measure returned throughout the land". At a later date

(86 B.C.), when Athens had ventured on a revolt of a kind to exasperate the conquerors, the city, when captured, though given over to the avarice and passions of the soldiers for several days, was left, in the main, unhurt; a few ringleaders were slain, but the great bulk of the population were left to pursue their ordinary lives.

Indeed, if we view the process on the whole, we may say in regard to the conquests of Greece, of Dalmatia, of Sicily, of Africa, of Spain, that the world had never before seen a career of conquest completed with so little butchery outside of the battlefield. And yet we should entirely mistake the rate of progress if we regarded the Romans as being approximately on the modern level. When Scipio captured Numantia (134 B.C.) he cut off the hands of 400 youths whose patriotic zeal had made them obnoxious; he then sold the population, all but fifty, whom he reserved for his triumph at Rome, where, finally, they were strangled in prison after the manner usual among the Romans in regard to prisoners led in chains at a triumph.

We are able to perceive in the Romans of the later republic the same features of warfare that seem to characterise all peoples who are of the middle and upper civilisation. First, there was a large population whose avocations kept them remote from warfare, and who, though they sometimes suffered the miseries of an invasion, were themselves little inclined for bloodshed. Just as in the China, Japan, India, Turkey of the beginning of this century, an eminently peaceful spirit seems to have reigned in the mass of the population, so also in the Roman Empire of the second century of our era, there were millions upon millions who had so far forgotten the savage instincts of their forefathers that war was hateful to them; the delights of spear and javelin were unknown; no longer could the fierce joy of driving a pointed blade into an enemy's intestines rouse their ardour. How soon a nation's character may be altered by the steady drafting away of its warlike spirits, and the abandonment of the rest to peaceful pursuits at home, was seen at Rome in the eminently unwarlike spirit that characterised its population in later times. Even so early as the year 9 A.D., when the victory of Hermann in Germany

and the complete extermination of the army of Varus had thrown the whole of Rome into what Creasy calls "an agony of terror" (*Fifteen Decisive Battles*, p. 124), the Emperor Augustus found it impossible to induce the Romans to enlist for service. He had to cast lots for the choice of those who were to fight, and when they refused he strove by disfranchisement, by confiscation, and finally by threat of death, to compel them to take the field. Even these were unavailing, and he had to form his army of emancipated slaves and veteran soldiers past the age of service. We all of us have enough of the fundamental martial spirit left in us to feel a certain contempt for so pusillanimous a condition, but it indicates how very marked, under suitable circumstances, may be the decline of bloodthirsty ambitions, and that, too, without the influence of any external teachings, but merely as the result of natural processes.

When, therefore, we try to estimate the progress in peaceful sympathies displayed by Chinese, Hindoos, or other people in middle or upper civilisation, we must not suffer our attention to be wholly monopolised by the troops in the field, by the narrative of their excesses and cruelties; we must bear in mind also the great sedentary body of peace-loving folks at home. And the opinions of these latter always begin to tell more or less on the conduct of armies. The general abroad is no longer animated by the idea that his people at home will exult to see him return with human heads; and his glory will not be exalted by records of hateful enemies swept utterly out of existence. Warfare now is a matter of policy more than of bloodthirsty passions. Sympathy, it is true, is not yet grown so deeply rooted that it can be relied on to secure a merciful treatment when interest calls for severity. People can still be cruel to serve their own ends, but cruelty for its own sake, as among a horde of savage warriors, is out of date. As an instance of this phase of development take the career of Cæsar. Never did he shed blood or suffer his men to shed it for the mere sport of killing or for the satiation of a blind revenge. Yet never did he allow a feeling of mercy to stand between him and a definite purpose. Hence his wars, like those of all people on the same level, show a general leaning

to indulgence as a matter of choice when nothing interferes, but an apparently callous indifference to horrors if they are likely to make the future easier or safer.

His first campaign secured the defeat of the Helvetii, and, in the words of Mommsen, "the lot of the vanquished was a comparatively mild one". All the survivors of the battle were sent back to their homes or settled comfortably in new ones. (*De Bell. Gall.*, i., 28.) After the defeat of Ariovistus, shortly following, he might, as Mommsen says (v., 7), have destroyed all the Germans on the west bank of the Rhine, but he treated them with great indulgence. The Belgian tribes were dealt with in a spirit of leniency, all but the Aduatuci (56 B.C.), who had treacherously attacked his camp by night. They were sold into slavery to the number of 53,000. (*De Bell. Gall.*, ii., 33.) In general the people of Gaul were merely disarmed and required to give hostages, but the Veneti, who, having given their faith, revolted, were all sold into slavery with the exception of the council of their chief men, who were put to death (iii., 16).

An awful bloodshed, it is true, marked the conquest of Gaul. Sismondi (i., 60) considers that in battle or in after-battle slaughters about a fourth of the population of the country were slain during the eight years of Cæsar's campaigns. The conqueror himself relates in calm, incisive words, with never a syllable which would hint at regret, how he as nearly as possible extirpated the whole race of the Eburones (vi., 43); how at Bourges the exasperated soldiers massacred 32,000 persons, sparing neither sex nor age (vii., 27). Few will forget the odious treatment of Vercingetorix; and Cæsar's own account is from time to time marked by spots of blackness, whose very simplicity and absence of all consciousness of a need for extenuation indicate clearly that they were fairly well in accord with the moral feeling of the times. Yet when he had defeated the Usipetes, with an awful slaughter it is true, and when 430,000 of that nation had fallen into his hands, he treated them most favourably; and it shows the great difference already established between barbarian and civilised warfare that these people trusted the clemency of Cæsar, but dreaded the prospect of being abandoned to the ferocity of

the Gauls whose lands they had invaded. They begged to be allowed to stay near their Roman conquerors rather than face the skull-gathering, scalp-decorated warriors of their own grade of development. (*De Bell. Gall.*, iv., 15.)

If Cæsar's career explains how the morals of warfare appeared in those days to the man of action, Cicero's words express the mature opinion of the philosopher; and they equally suggest that feelings of mercy had grown, though still sadly limited and confined. He tells us (*De Officiis*, i., 11) that "in every state the rights of war should be carefully conserved. Wars, in fact, should be undertaken only for the purpose of being able to live in peace without molestation, and when victory is won those of the vanquished who have been neither cruel nor savage in the conflict should be spared. And the justice of any war we undertake should be carefully registered beforehand in the fecial college."

Lecky, I think, very adequately sums up the condition of warfare in the times of the empire when he says (*Europ. Mor.*, ii., 257) that "the normal fate of the captive, which among barbarians had been death, was in civilised antiquity slavery; but many thousands were condemned to the gladiatorial shows, and the vanquished general was generally slain in the Mamertine prison". If this errs, it is chiefly by forgetting the numerous cases of vanquished populations which were neither slain nor sold, but left as tributary subjects. On the other hand, cases constantly occurred in which populous cities were abandoned to indiscriminate slaughter, one of the worst being that in which Aurelian utterly exterminated the inhabitants of Palmyra after inflicting malicious tortures on its philosophers and men of learning. (Gibbon, chap. xi.) But it is very evident that such melancholy scenes did no good to the reputation of the perpetrator, for (260 A.D.) when the Emperor Gallienus sent word to his generals in Illyrium that "the male sex of every age must be extirpated," he added the condition, "provided that in the execution of boys and old men you can contrive means of saving our character". (Gibbon, chap. x.) When Gallienus himself was killed, the Senate solemnly directed that all his relatives and servants should be thrown headlong down a steep stone stair, and so massacred.

To the great mass of the Roman Empire war and bloodshed remained for some centuries unknown, and Gibbon says (chap. ii.) that "the tranquil and prosperous state of the empire was warmly felt and honestly confessed by the conquered races as well as by the Romans themselves". Speaking of the third century, he tells us that the people of all the empire "abandoned the rough trade of war to the peasants and barbarians of the frontier, who knew no country but the camp, no science but that of war," while the provinces "flourished in peace and prosperity". Their leading men devoted to law or medicine, to literature or science, to architecture or art, to merchandise or the care of their fertile estates, those energies formerly chiefly expended in warfare; while the bulk of the people farmed or wrought at a hundred mechanic callings, living and dying with never a wish to share the fierce glories of the combat.

Warfare in Early Mediæval Europe.

Had the Roman Empire been left to work out its beneficent promise, how many centuries of restless conflict, pillage and slaughter, private feud and public carnival of desolation, would have been spared! But the world passed under the dominion of hordes not yet on the level of the middle barbarian. The Roman citizen, for centuries unaccustomed to bear arms, which indeed were unknown in private life, became the slave, or at least the patient subordinate, of truculent tribes that never were without their weapons; and the progress of mankind in its most favoured regions was reversed to the conditions of ten centuries earlier. Strange to say, it required just another ten centuries to secure once more the same standing, for it is accurate enough to say that Europe in the fifteenth century was fairly representative of the Roman Empire in the fifth, while the barbarians of the fifth century A.D. would be not unfairly compared with the Romans of the fifth B.C.

War was the only ambition, the ruling passion of life, with a Teuton or a Hun. He was taught that to die on a field of battle was his surest passport to a paradise whose dearest joy should be the quaffing of mead from the skulls of

enemies. "Plenty and contentment at home, but the bloody game of war abroad, these were his desires," says an excellent authority. (Thorpe's *Northern Mythology*, i., 202.) Gibbon asserts that they always carried arms, and that their popular assemblies, "inflamed with passions and strong liquors," too often turned a political meeting into a furious struggle.

Their customs in war took a sombre colour from that dark passion of blood and vengeance which everywhere characterises men of that level. Before a battle their priests devoted, in solemn rhymes, to the war god, the whole of the hostile army then in front, and when the victory was won every captive was slaughtered accordingly. When Hermann decoyed the ill-fated army of Varus into the forests and defeated it, every man was either slain in the battle or captured after it. All the prisoners were led into the wildly-wooded glens, wherein altars had been hastily reared, and there were they sacrificed to the god. Not a man escaped, and only by slow filtering did the gloomy news reach Rome. (Tacitus, *Annales*, i., 61.) That this was their usual custom is clearly shown in Latham's notes to Tacitus (p. 49), where the concurrent testimony of six different writers of the Roman period indicates that among all Teutonic races some at least of the captives were always sacrificed. The Gauls, Britons, Lithuanians, and other peoples of the time upon the same level, also offered up some portion of the captives in their gloomy rites. Gibbon describes the ceremonies wherein the Huns sacrificed each hundredth man of their prisoners, cutting off his arms at the shoulder and tossing them before his eyes into the blazing altar-fire prepared for his whole body subsequently (chap. xxxiv.). The Gauls used to crucify their prisoners, or tie them to stakes and make targets of them for the practice of archery and of javelin-throwing.

When the Huns swept through the Roman Empire they revelled in an awful orgie of slaughter, in which nothing was to be gained but only the gratification of a fierce instinct for blood. Millions were killed for the mere lust of killing. (Robertson, *State of Europe*, note v.) Procopius was an eye-witness of the barbarian ferocity in Spain and Africa. They massacred every human being in many a populous city; they

gathered their captives together and slew them in heaps that polluted the air for leagues. He reckons that about 5,000,000 people were slain in the terrible eruptions of only a few years, victims to a mere thirst for blood; and at a much later date, when Tamerlane led a race on the same barbarian level to the conquest of the Saracen Empire, his army is estimated, as Gibbon tells us, to have slaughtered 4,300,000 persons in the wanton rage of destruction. The Hungarians in the ninth century delighted to drink from the skulls of their enemies, and the Russians in the tenth gave no mercy to a conquered foe.

The Franks revelled in slaughter; now we hear how they took all the young girls of a town, 200 in number, rolled over them the wheels of carts, and cast the bodies to their dogs and hawks (Michelet, i., 59); and again we read of a French king, after vanquishing his rival, burying him and the whole of his family alive. (Gibbon, xxxviii.) Scenes of this sort made a large share of the daily life of the times. Robertson says of all the barbarians of the sixth and seventh centuries, "wherever they marched their route was marked with blood. They destroyed everything, respecting no age or sex or rank." (*View of State of Europe*, section i.) It is well known that the vikings, when they descended among the Romanised peoples of England and France, slaughtered all before them, a favourite game being the tossing of children into the air and the dexterous catching of them upon the points of their spears. A certain chief derived his surname of Barnakall from his efforts to put a stop to this useless and inhuman practice. But we do not learn that he was successful. (Michelet, *Hist. of France*, i., 100.)

When the Saxons landed in England how different was their conduct from that of the civilised Romans before them! The Romans had spared the people, and converted them into a prosperous province. Dr. Gardiner (*Student's Hist. of England*, p. 29) speaks of towns in which not a Briton was left alive by the Saxon invaders. And in general all the population who failed to escape into the rugged west were involved in one promiscuous extirpation. All that Gardiner can report in the way of mildness is that "a considerable number of women were preserved from the slaughter".

But the ferocity which the Saxons displayed against the conquered Britons was equally evident in their quarrels among themselves. They were for ever at war, and their revenge knew no limit to its atrocities. Milton (*Hist. of England*, book iv.) gives from the old chronicles a condensed list of wars, with some specimens of their attendant cruelties. He apologises for the wearisomeness of the catalogue, but reminds his readers how much more disgusting are the sordid masses of the originals. Yet we know very well that the chronicles of the time gave after all only some specimens of conduct that was widely spread and always in action. Milton abandons the record, exclaiming: "Such bickerings to recount, what more worth is it than to chronicle the wars of kites or crows flocking and fighting in the air?"

For indeed the state of all Europe was one of chronic warfare. The Romans had seldom been at peace, but their conflicts had mostly raged at or near the frontiers. Now, as Guizot says, "all becomes war, and everything has the character of war". A man's consequence is derived only from the amount of blood he has spilt; in short, the barbarian standard is everywhere the rule. But there lingered enough of the old civilisation to provide historians who could place on record the kind of life that passed around them. So it comes that for the first time we can have a fairly minute picture of what the barbarian condition actually is.

Follow the story of France under Clovis and his successors; observe the bloodthirsty craving of the men, and even of the women; remember that this region was perhaps the most favoured at that time in Europe, excepting only the Eastern Empire round Constantinople, and then we gather a fair conception of barbarian life. Under the strong hand of Charlemagne something a little like order began to appear. But even he, according to Guizot's catalogue (ii., 186), fought no less than fifty-three wars in his own reign, and he seems to have had no compunction in beheading in one day 4500 Saxon prisoners whom he had captured. Yet just as his scandalous life in regard to women passed with little notice in these licentious times, so did his atrocities seem small things in the ocean of rapine and bloodshed.

How we should shudder could we be transported to the daily life of Italy in the tenth or eleventh century; what we know of it is only an awful recital of fights and feuds, of massacres and private and public murders, in which, as Hallam says (*Mid. Ages*, iii., 1), "no mercy was ever shown by the conquerors". In Florence we see by the history of Machiavelli that strife and bloodshed were perpetual, and that the combatants not only killed each other, but tortured the living captive and mutilated the body of the fallen foe. The story of Venice is rendered hateful by the long catalogue of assassinations and such cruelties as the massacre of the whole crowd of Genoese prisoners after the battle of Cagliari. These people were zealous for a faith which nominally taught them peace, but war and bloodshed were their glory and highest ambition. Gibbon tells us (chap. liii.) that "in the tenth and eleventh centuries throughout Europe every peasant was a soldier, every village a fortification, each wood, each valley, was the scene of murder and rapine". Every bishop was free to exchange his mitre for a helmet, and many did so. In one battle alone of that period there were counted 540 of the superior clergy among the combatants. The popes themselves were warlike, and showed as little mercy as any of their times; and the Papal households of the eleventh and twelfth centuries, with their courtesans and bravoes, were scenes of periodic assassination and conflict.

But all these disorders inevitably imply the eventual elimination of quarrelsome and unsocial types, and thus the improvement natural to mankind went on. Two steps in advance may be seen during the twelfth and thirteenth centuries. The first was the gradual decline of the practice of slaying defenceless prisoners. We see a strong tendency in this direction at an even earlier date. The Normans used their victory in England more after the Roman than after the barbarian fashion. It is true that William the Conqueror, enraged by a revolt in the northern countries, is said to have slaughtered every living being over a tract 100 miles wide; and we know (Michelet, i., 157) that after the capture of a small town in France he cut off the hands and feet of numbers of his prisoners. But on the whole his wars, and those of

most of his contemporaries, show some discrimination in bloodshed, and while it was customary to kill all prisoners in arms, a growing opinion held it unmanly to slay the defenceless. Often, indeed, it was deemed unworthy even to slay an armed enemy when captured. Thus after the battle of Bouvines, the biggest struggle of its time, the conquerors spared all their prisoners and held them to ransom.

The second promising indication of this growth of better feelings was the tendency to grow weary of warfare, which is indicated by the general custom of the "truce of God". Throughout all Europe the right of private war was freely claimed and generally allowed. As Hallam tells us (*Mid. Ages*, ii., 2), "every man who owned a castle and had a sufficient number of dependants to take the field, was at liberty to retaliate upon his neighbours whenever he thought himself injured". The efforts of the Church, growing more pacific in the main, were assisted by the increasing weariness which men felt in being always upon the strain, ever armed and constantly watchful. Beaumanoir (*Coutumes de Beauvaises*, p. 300), writing at the end of the thirteenth century, gives a full and, as it seems to us now-a-days, most astounding account of the ideas of the times as to private warfare. Two full brothers ought not to wage war on one another; not because there ought to be trust and affection between them; no such thing was expected in those times, for the right to avenge a quarrel and wash out an insult in blood far transcended any bonds of natural affection. No; the reason was that, as they were brothers, they had the same relatives, and if one were slain his kinsmen would be unable to avenge him, being equally kinsmen of the victor. But in the case of half-brothers no such restriction obtained, for one had a set of kinsmen not common to the other. The nine limitations placed upon warfare in these times are carefully set forth in Beaumanoir, and they are reproduced in compendious form by Dr. Robertson. (*View of State of Europe*, note xxi.)

All the higher ecclesiastics claimed the right of private warfare; but in 990 A.D. (see Robertson) several of the French bishops made an ineffectual attempt to set the influence of the Church in opposition to the horrors of never-ending feud and

devastation. In 994 a council was held at Limoges, whither the bodies of many saints were carried, and on these sacred relics the barons of the neighbourhood swore that they would extinguish their animosities. This effort, too, in spite of strenuous exertions among the better clergy, came to nothing, but it made a memorable precedent for subsequent times when men's minds were riper for a change. In 1032 a bishop, by a story of an angel who had appeared to him with denunciations against those who profaned the festivals of the Church by bloodshed, succeeded in imposing on the greater part of France the custom of abstaining from warfare during Lent and on Sundays.

These breathing-times began to be appreciated, and the Church quietly used its influence to extend them, the practice meanwhile being copied in other countries. The better popes of the two succeeding centuries used their power to promote the new movement, and in course of time the "truce of God" became a well-known and generally enforced regulation, according to which all private hostilities ceased on Wednesday at sunset, not to be resumed again till Monday morning; thus reducing the time of tension to only three days in the week. Every male, on reaching his twelfth year, had to make oath to his confessor that he would observe the rule, consigning his soul to torments if he should violate it. The popes meanwhile directed the bishops to excommunicate all who notoriously refused to comply with this new scheme of mercy. (Lappenberg, *Anglo-Norman Kings*, p. 76.)

In proportion also as the central power of the sovereigns became dominant, the right of private warfare even on the other days was slowly suppressed. In France it was moderated by Louis IX. (1226), further checked by Philip IV. (1314), restored by Philip of Valois (1336), but finally suppressed as far as law could suppress it by Charles VI. (1390). English history when carefully examined reveals the same limitations occurring at even an earlier period.

Now, again, as in Roman times, began to appear bodies of population who had no desire for war, and who contrived to pursue their callings with little conflict among themselves, and as little as might be against outsiders. These men in the

main formed boroughs. Being on the side of law and order, having no wish to appropriate other people's property, but only to gather and preserve their own, they generally took the part of the central power. They placed themselves under the special protection of the sovereign, who gave them a charter and secured them as fair a measure of immunity as possible from the wars and turmoils of the neighbouring barons. Had these men been truly cowards, as the warlike of their times were inclined to consider them, they must have gone under; but amid their general preference for peace, they could be stout enough of their hands also, and though slow to don their bucklers, they could give a most excellent account of themselves in a conflict. They helped therefore to establish the strength of the central power, which, in proportion as it grew strong, was able to suppress the violence of the barons who claimed the right of private war.

Decline of the Spirit of Ferocity.

The burgess population, therefore, amid which peaceful industry in general prevailed, most steadily increased, being continually joined by those wearied of war in other ranks, and multiplied by the calm operation of conjugal, parental and social sympathies. Those without devoured each other in endless warfare, and paid the penalty of disorderly lives in a lessened progeny and diminished representation in succeeding generations.

And so again the more merciful type prevailed and each century saw some progress. By the twelfth it was unusual to torture or mutilate a vanquished enemy, though of course old practices here and there survived, as when the brave archer who shot King Richard Cœur-de-Lion was flayed alive. The wanton massacre of inoffensive populations became less common, and in consequence when it did occur it left on the reputation of the perpetrators a stain so deep that the general effect of public opinion began to be felt. In 1370, when the Black Prince captured Limoges, he put, some say the whole population, others only 3000 of them to death. All ranks and both sexes cast themselves on their knees before

him, saying, "Mercy, mercy, sweet sir". The prince was too ill to be able to sit on horseback, but he lay in his litter and watched the slaughter of men, women and children, sparing only a bishop and three gentle knights. (Froissart, cap. v.) But occurring at the end of the fourteenth century the deed was out of date, and all Europe rang with execration of it, as also of an atrocity in the same war wherein a church was surprised full of a congregation of 1200 persons, when all were put to death, women and children perishing as well as men. Michelet truly says such ferocity was now an anachronism. Four centuries before, it would have passed as one of the ordinary features of warfare. Now it was unhesitatingly condemned.

But in regard to the treatment of soldiers captured after a battle or a siege, the feelings of this fourteenth century were still in process of transition. Edward III., after the battle of Sluys, made a huge slaughter of the French prisoners, hanging many of the captains on their own masts; and at Crecy, of the 30,000 French who fell, a very large proportion were men who might have been taken prisoners, but were knocked on the head by reason of national animosity. A year or two later the French, on their side, when they began to recover some parts of their southern provinces, destroyed to the last man the English garrisons in every place they captured. In general, however, during the wars of these times it was becoming more usual to dismiss the common soldier and to hold the knight and noble for ransom.

In the fifteenth century it had become dishonourable to slay a man who surrendered, or one who was securely a prisoner after a fight was over. In all the wars between Louis XI. and the Dukes of Burgundy, though violent rancours existed and many atrocities occurred, the slaughter of prisoners was rare. We see the temper of the times in connection with the battle of Agincourt (1415); a massacre that occurred therein, though of a kind altogether within the ordinary rights of war only a century before, was deemed to require apology. Henry V., the victor, had secured an immense number of prisoners, more than the total of his own

army; these were in his rear when a renewal of the fight began in front, and the word was passed that the prisoners were overpowering their guards. Henry feared to be enclosed by enemies, and sent orders for the prisoners to be slain as rapidly as possible. But so soon as the alarm was found to be needless he sent instant instructions to stay the carnage. Yet for this slaughter he thought it necessary to publish his excuse. (*Memoirs of Henry V.*, J. E. Tyler, ii., 174.) In general Henry was very merciful. After the capture of Harfleur the lives of all were spared; the women were allowed to keep their clothes and five sous each, though everything else was plundered. After taking Caen he certainly expelled the whole 25,000 of the population, but the lives of all were spared; and during the whole invasion of Normandy, priests and women were as far as possible exempted from suffering. (Michelet, *Hist. of France*, ii., 91.) His only cruelty occurred before Rouen, when he hanged some prisoners on gibbets before the city as a threat to induce the citizens to surrender. Seven years previously, at the battle of Hasbain, Duke John the Fearless of Burgundy butchered his prisoners, to the number of 20,000, but he, too, found it necessary to explain that this was only because, when his men were wearied, he saw a body of 10,000 fresh combatants on the march against him, and his army were too few both to fight and to mount guard. Nevertheless his action was condemned, and formed a blot on his memory.

But it would lead to too intricate an analysis of history were I to attempt seriously to depict the full measure of improvement that took place from the tenth century onward. It will be ample for my purpose and sufficiently suggestive if I take in one country three wars at intervals of two or three centuries, and compare the degree of humanity displayed in each. For that purpose I shall choose England, comparing the wars of Stephen and Matilda in the twelfth century, the wars of the Roses in the fifteenth, and the wars of Cavalier and Roundhead in the seventeenth.

The first of these is described by Gardiner (*Student's History*, p. 135) as a time of unrelenting ferocity. He quotes the old chronicles to show that prisoners were "hung by the

feet and smoked with foul smoke, some were hung by their thumbs, others by their heads while coats of mail were attached to their feet, they knotted strings about men's heads and twisted them till they went to the brain," and so on through lists of horrors. Hume speaks of the "fierceness, the wanton destruction, the implacable vengeance" of these wars; the people everywhere were made to suffer, the crops destroyed, the instruments of husbandry demolished; the farms were left untilled, and a grievous famine fell upon the land. Green calls these wars "a mere chaos of pillage and bloodshed," and he paints what he calls a "ghastly picture of a nation's misery".

Move forward three centuries to the wars of the Roses. They were still stained by fierce passions and the butchery or savage execution of foemen. But there was no slaughter or even spoliation of unarmed populations. Green describes them (*Short Hist.*, chap. vi.) as a "thick crowd of savage battles, of ruthless executions and shameless treasons," but he quotes with approval the words of Philippe de Commines, that "there were no buildings destroyed or demolished, and the mischief of war fell on those who made the war," while he speaks of "the general tranquillity of the country at large". There can be no doubt that these wars did an immense amount of ultimate good to England. The ferocious barons, with their idle and rapacious retainers, killed each other off, purging the land of much unwholesome blood, but all the southern counties were filled with a population quiet, industrious and orderly, who took no part in the conflict, and were but little affected by it. The very different aspect which English society exhibited in the reign of Elizabeth, only a century later, was in large measure due to the fact that during the wars of the Roses, which lasted just thirty years, or a generation, 100,000 men fell in the great battles, and probably as many more in smaller fights, that is, 200,000, or about one-fifth of the men of the country. These were the swash-buckler men, the lovers of blows and bloodshed; they could do nothing more useful to the land than kill each other out of the way, while the other four-fifths of the Englishmen of their time went peaceably forward with their quiet pursuits, reared their families,

and bequeathed to them a happier England, such as Shakspeare saw it.

Move forward from the wars of the Roses, two centuries more, and take a glimpse at the war of the Cavaliers and Roundheads. What a general air of generosity and high feeling characterises it! Sad enough it was, but how few were the cases of wanton bloodshed! On both sides we seem to hear, not the exultant shout of the warrior who trusts that his blade will soon drink deep of gore, but the solemn regret of citizens who, while they fight for what they think the right, are constrained to groan, "Oh, the pity of it!" There is but one instance of that common savagery of previous wars, the furious slaughter of a vanquished foe. This occurred at Drogheda, but the 1200 there slain were all men, and with few exceptions in arms. Nevertheless, the temper of the times was so radically changed that Cromwell felt it needful to excuse himself. He writes (Carlyle's *Cromwell*, ii., 198): "I am persuaded that this is a righteous judgment of God upon those barbarous wretches, who have imbued their hands in so much innocent blood, and that it will tend to prevent the effusion of blood for the future; which are the satisfactory grounds to such actions which otherwise cannot but work remorse and regret".

What a change in the temper of the soldier! Moreover, reflect that this was the last war upon English soil; that two and a half centuries have since passed by in almost unbroken repose; recollect that during all that period the city of London has never seen an enemy, and we realise how marked, and, from the cosmic point of view, how rapid has been the growth of the sympathetic ideal.

But in France there is the same story to be told, though in different degree. As Michelet says (*Hist. of France*, book iii.), "The deeper we plunge into past times, the further are we removed from the pure and noble generalisation which is the growth of modern feelings, that quick and lively sympathy and social instinct" which "unites a nation, while conquest only fastens and chains hostile members together". Niebuhr says that the last war of horrors in Europe was when the Palatinate was devastated by the troops of Louis XIV. (*Lectures*

on Roman History, ii., 119.) But that devastation touched no life. Louvois, by the cruel orders of the king, burned every town, village and farmhouse of the district, but he killed no one. In the twelfth century this would have been reckoned an admirable mildness, but in 1689 all "Europe was horrified at it, and all the officers who had to execute the order were ashamed of it". (Voltaire, *Siécle de Louis Quatorze*, xvi.) About this time Montesquieu was able to say that "slaughters of prisoners made by soldiers after the heat of the action are now condemned by every civilised nation". (*Esprit des Lois*, xv., 2.)

By the middle of the seventeenth century it was usual for each regiment of an army to have its surgeon. At first the soldiers had to club together to pay his salary (Buckle, *Misc.*, i., 412), but afterwards the State always provided the funds, and gave him the rank of a sub-lieutenant. (Monteil, *Hist. des Français*, iv., 62.) It became the custom for these surgeons to care for the wounded enemy after their own wounded had been attended to, a remarkable reversal of the mediæval practice. By the end of last century, it had become the prevailing feeling that a soldier was unworthy of the name who would injure a fallen enemy, or a defenceless prisoner; nay more, he would be considered to have come short of the reasonable ideal of his profession if he were incapable of the ordinary humanity of assisting a suffering and unresisting foe.

From the fifteenth century onward we may observe in history an increasing tendency for generals to punish their soldiers who ravish women in the hour of victory. Previously it had been through all the middle ages considered a perfectly natural and justifiable thing for the conqueror to gratify his brutal passions. The soldiers of the cross outraged the women of every captured town or subjugated district. It is strange in this respect to read the work of Grotius, *De Jure Belli*, and see the struggle of the ideals of a better time against the power of precedent. As a lawyer, the influence of the past lies heavily upon him, and he tells us that the rape of women by the victors is by many regarded as lawful. He himself is doubtful, but as a Christian philosopher of the seventeenth century he inclines to the side of mercy, and considers it at least a generous thing to preserve the honour of the female

captives. But he is quite certain that the victor had the right, if he chose to exercise it, of carrying off his prisoners and selling them as slaves, though he considers such a doom too harsh for those of Christian faith. These ought to be kept only till ransomed.

In no case, as Grotius thinks, ought a soldier to use his full rights; he should at least spare the innocent, and children, and women, unless they have made themselves obnoxious; old men, clergy, husbandmen, merchants and the like, and even soldiers who surrender as prisoners ought not to be slaughtered. But he allows apparently (book iii., cap. ii.) that where a town or province has been rebellious against its lord, he has the right to intimidate it, and punish it when reduced, by slaying a certain proportion of the population if he pardons the rest. Indeed the history of France, Italy and Spain through all the fifteenth and sixteenth centuries is full of these ugly compromises, and Grotius was writing what, as a matter of fact, was the actual law of warfare, rather than what he personally would consider it ought to have been.

There can be no reasonable doubt, however, that the sixteenth century saw Europe in general at a stage in regard to warfare distinctly advanced as compared with the best of Roman times, and since then a steady increase of the sympathetic element has been visible. In proportion as the practice of duelling went out we may assume that the innate thirst of man for vengeance and the quenching of evil temper in blood has declined. Wars, alas, there still are; and Europe has in this century spent upon actual campaigns 5,000,000 lives and £3,000,000,000 of money wrung from the long labours of peasant and artisan. What the cost has been of supporting in times of peace the huge armaments of these latter days it would be difficult to estimate. Sometimes, as in the four years' Civil War of America, the military fervour blazes up with amazing force. That saddest struggle of modern times was, as Walt Whitman says (*Specimen Days*, p. 89), "lit up with every lurid passion, the wolf's, the lion's lapping for blood, the boiling volcanoes of human revenge for comrades and brothers slain, with the light of burning farms, the heaps of smutting, black, smouldering embers, and in the human heart everywhere blackness".

Yet in this war non-combatants were spared; a tender care was taken that women and children might not suffer; prisoners by their very numbers and the scarcity of means were forced in many instances to undergo much suffering, but the effort generally was to make them fairly comfortable, and a wounded enemy had all the benefit of ambulance and surgical care that could be provided. It is to be remembered likewise that this one war represents the only outbreak in half a century amid a vast population; and that for a generation back this immense people has dwelt in peace within itself and with its neighbours. In Europe also there are seven countries which have passed half a century without ever seeing the face of an enemy, and in general, while science is steadily augmenting the power of an army to destroy, the actual proportion of the population killed in warfare is less than the two hundredth part of what it was a thousand years ago.

But the goal of sympathy is not by any means yet reached. The transition still goes on, and if we start from the bloodthirsty state of Europe in the sixth century and allow that 2000 years in all may elapse before we can expect the practical cessation of wars, mankind will then have travelled at a rate not unsatisfactory. It is very probable indeed that men may at a far earlier date witness better things; that less than seven centuries hence, the nations may have learnt to live in harmony. Prophecy is no province for the prudent man, yet we may safely enough assert that the time approaches when wars will have an end, and probably the most salient feature of the stage of middle culture will be that martial ardour, the enthusiasm of bloodshed, will be extinct, as a practical world's force, though still attesting in its suppressed fires the long ingrained passions of the past. War will be looked upon by the people of the times to come as we look back on the cannibalism of our ancestors in the times that are long gone by. For still at work, though invisible unless we carefully look for them, are those natural influences which from generation to generation are culling out the unsympathetic elements, and giving the earth to be possessed by the more sympathetic.

End of Vol. I.

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